

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE NORTHERN DISTRICT OF OHIO
3 EASTERN DIVISION

- - -

3 IN RE: NATIONAL : HON. DAN A.
4 PRESCRIPTION OPIATE : POLSTER
5 LITIGATION : MDL NO. 2804

5 This document relates to: : Case No. 17-MD-2804
6 :

6 The County of Summit, Ohio :
7 Ohio et al. v. Purdue Pharma :
8 L.P., et al., Case No. :
9 17-OP-45004 :

8 The County of Cuyahoga v. :
9 Purdue Pharma Purdue Pharma :
10 L.P., et al., Case No. :
11 18-OP-45090 :

11 - - -

12 - HIGHLY CONFIDENTIAL -
13 SUBJECT TO FURTHER CONFIDENTIALITY REVIEW

13 VOLUME I

14 - - -

15 May 9, 2019

16 Videotaped deposition of
17 CRAIG J. McCANN, Ph.D., CFA, taken
18 pursuant to notice, was held at the law
19 offices of Morgan Lewis & Bockius, LLP,
20 1111 Pennsylvania Avenue, NW, Washington,
21 D.C., beginning at 10:03 a.m., on the
22 above date, before Michelle L. Gray, a
23 Registered Professional Reporter,
24 Certified Shorthand Reporter, Certified
25 Realtime Reporter, and Notary Public.

- - -

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(Greene Ketchum - via telephone)

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17 VIDEOTAPE TECHNICIAN:
18 Devyn Mulholland

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1 - - -
2 I N D E X
3 - - -
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Testimony of:

5
CRAIG J. McCANN, Ph.D., CFA

6
7 By Ms. McEnroe 16
8 By Mr. Eppich 253
9 By Mr. Boehm 323
10
11

12 - - -
E X H I B I T S
13
14 - - -

15	NO.	DESCRIPTION	PAGE
16	McCann-1	Notice of Videotaped Deposition	17
17			
18	McCann-2	Banker Box Initial Report	23
19		1-11 Appendices Supplemental Report	
20		A through F Appendices Second Supplemental	
21		Report Appendices 1 and 2	
22		& Attachment	
23			
24			

1	-	-	-
2	E X H I B I T S (Cont'd.)		
3	-	-	-
4			
5	NO.	DESCRIPTION	PAGE
6	McCann-3	Expert Report of Craig J. McCann, Ph.D. 3/25/19	24
7			
8	McCann-4	Appendix 1 Resumé	105
9			
10	McCann-5	Appendix 2 Correction to the ARCOS Data	111
11			
12	McCann-6	Expert Report of Professor David Cutler 3/25/19	231
13			
14	McCann-7	Morgan Keegan v Garrett Synopsis	248
15	McCann-8	Appendix 6, List of Reporter Company Families	315
16			
17	McCann-9	Appendix D, Additional McKesson Figures and Tables	321
18			
19	McCann-10	Excessive Purchases Schedule II Exhibit P CAH_MDL_PRIORPROD_DEA07_ 01384160-R-61	370
20			
21			
22			
23			
24			

1 - - -

2 DEPOSITION SUPPORT INDEX

3 - - -

4

5 Direction to Witness Not to Answer

6 PAGE LINE

None.

7

8 Request for Production of Documents

9 PAGE LINE

None.

10

11 Stipulations

12 PAGE LINE

None.

13

14 Questions Marked

15 PAGE LINE

None.

16

17

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19

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1 - - -

2 THE VIDEOGRAPHER: We are
3 now on the record. My name is
4 Devyn Mulholland. I'm a
5 videographer with Golkow
6 Litigation Services.

7 Today's date is May 9, 2019.

8 The time is 10:03 a.m.

9 This video deposition is
10 being held in Washington DC, in
11 the matter of National
12 Prescription Opiate Litigation.

13 The deponent is Craig J.
14 McCann.

15 Counsel will be noted on the
16 stenographic record.

17 The court reporter is
18 Michelle Gray and will now swear
19 in the witness.

20 - - -

21 ... CRAIG J. McCANN, Ph.D., CFA,
22 having been first duly sworn, was
23 examined and testified as follows:

24 - - -

1 EXAMINATION

2 - - -

3 BY MS. McENROE:

4 Q. Good morning, Dr. McCann.

5 A. Good morning.

6 Q. My name is Elisa McEnroe.

7 I'm counsel for Rite Aid of Maryland,
8 Inc., doing business as Mid-Atlantic
9 Customer Support Center. Just call that
10 Rite Aid. I'll be asking you questions
11 this morning. You've been deposed
12 before, correct?

13 A. Yes.

14 Q. And you are here as an
15 expert witness on behalf of the
16 plaintiffs in the National Prescription
17 Opiate Litigation; is that correct?

18 A. Yes.

19 Q. You've submitted a number of
20 reports in this matter, correct?

21 A. Yes.

22 Q. An initial report on
23 March 25th and two supplemental reports
24 thereafter?

1 A. Yes.

2 Q. You understand that you're
3 appearing here today pursuant to a
4 deposition notice?

5 A. Yes.

6 Q. I'd like to hand you what
7 I've marked as Exhibit 1.

8 (Document marked for
9 identification as Exhibit
10 McCann-1.)

11 THE WITNESS: Thank you.

12 BY MS. McENROE:

13 Q. And this is a copy of that
14 deposition notice, correct?

15 A. Yes.

16 Q. So I know you've been
17 deposed a number of times before. Just a
18 couple quick reminders as we get going.
19 Especially for this litigation, we're
20 quite pressed for time, although we have
21 two days with you, 14 hours. So a number
22 of different counsel are going to ask you
23 questions through the two days. And
24 you're going to see that we're going to

1 try and move things along pretty
2 expeditiously. So we ask that you help
3 us cooperate with that.

4 Of course we want you to get
5 complete answers as intended on the
6 record, but just so you understand
7 upfront, there will be some sensitivity
8 to the time throughout the two days.

9 Do you understand that?

10 A. I do.

11 Q. And you're here to answer
12 our questions and hopefully we won't
13 speak over one another. I ask that you
14 let me finish my questions and I will do
15 my best to let you finish your answers.
16 You understand?

17 A. I will. I do. Thank you.

18 Q. And if you ever need a
19 break, just let us know. My only request
20 is that you finish any question that
21 is -- you answer any question that is
22 pending at the time of the break. All
23 right?

24 A. Yes.

1 Q. One last thing is, if you
2 don't speak up, I'm going to assume that
3 you understand my question. So if you
4 don't understand it, and especially when
5 we get into some of the more technical
6 things. I may not ask it a way that
7 makes exact sense to you. So just let me
8 know, and then I can always try to
9 rephrase the question or ask it a
10 different way. Okay?

11 A. Yes.

12 Q. Who contacted you first in
13 connection with this case?

14 A. I believe it was Mr. Mougey.

15 Q. When was that?

16 A. Approximately a year ago.
17 So early last year, February or March of
18 2018 is what I recall.

19 Q. And have you been working on
20 this case since that time?

21 A. Or shortly thereafter. So I
22 was contacted sometime a few weeks or a
23 month perhaps before I would say that we
24 actually started working on the case.

1 Q. Have you worked with
2 Mr. Mougey before?

3 A. Yes.

4 Q. On how many cases?

5 A. It depends a little bit on
6 how you count the cases --

7 Q. Sure.

8 A. -- because my office
9 processes a lot of cases that I'm not
10 personally involved in.

11 The cases that I'm
12 personally involved in would be in the
13 dozens, but out of the three or 4,000
14 cases I've been involved in, I don't know
15 how to quantify it more than to say some
16 dozens, anyway.

17 Q. When did you first meet
18 Mr. Mougey?

19 A. When we were both much
20 younger. I think almost 20 years ago.
21 15 years ago, at least, but maybe even a
22 little bit longer.

23 Q. And did you meet in a
24 professional setting?

1 A. Yes.

2 Q. In connection with a case
3 that you were working on?

4 A. Yes.

5 Q. As an expert witness?

6 A. Yes.

7 Q. On the same side as
8 Mr. Mougey?

9 A. Yes.

10 Q. And prior to this
11 litigation, what's the most recent other
12 case that you've worked on with
13 Mr. Mougey?

14 A. I testified at a FINRA
15 arbitration, securities arbitration
16 hearing with Mr. Mougey about a year ago.

17 Q. Are you working with
18 Mr. Mougey on any cases unrelated to the
19 opioid litigation at present?

20 A. Yes. At least my office is
21 involved in processing FINRA arbitrations
22 for Mr. Mougey's firm.

23 I don't think in recent
24 months, maybe even since last summer I've

1 personally been involved in those. But
2 we have done some work. My firm has done
3 some work for Mr. Mougey's firm in the
4 last year.

5 Q. And when you say FINRA
6 arbitrations, you are referring to
7 finance-related type of arbitrations; is
8 that correct?

9 A. Correct.

10 Q. Mostly having to do with
11 securities?

12 A. Entirely.

13 Q. Okay. A little bit of
14 housekeeping upfront.

15 So you mentioned that you
16 had submitted an expert report, and you
17 agree that there were two supplements.
18 You included with those -- that report
19 and those two supplements some
20 attachments and exhibits, correct?

21 A. Yes.

22 Q. So that we have it, this is
23 what we believe to be the entirety of
24 what you've submitted thus far. And

1 we're going to go through it in a little
2 bit more detail. So that the record is
3 complete later on, and in case any other
4 defendant wants to refer back to it, this
5 is what we believe is the entirety of
6 what you've submitted to us thus far in
7 terms of report, supplement, appendices,
8 and exhibits. Not all the supporting
9 background code. That was a little too
10 much to try to print out that your
11 counsel has provided.

12 But we're going to mark this
13 as Exhibit 2. And we're just going to
14 hold onto it. But if at any time you
15 want to refer to anything that you've
16 submitted to us, you just let us know,
17 and we can grab it out of Exhibit 2. Is
18 that right?

19 A. Yes. Thank you.

20 (Document marked for
21 identification as Exhibit
22 McCann-2.)

23 BY MS. McENROE:

24 Q. I put a sticker on the box.

1 I'm going to hold onto it.

2 MR. MOUGEY: That sounds
3 good.

4 BY MS. McENROE:

5 Q. To make things a little bit
6 easier, what we've done is for Exhibit 3,
7 we've bound together your original report
8 from March 25th -- and I'll hand this to
9 you in a minute so you can look at it,
10 with one addition.

11 We swapped in what I think
12 you referred to as an errata page, at
13 Page 35?

14 A. Yes.

15 Q. And then we included behind
16 a blue slip sheet the first supplemental
17 report that was submitted on April 3,
18 2019, without any of the attachments or
19 exhibits. And then behind the next blue
20 slip sheet, the April 15th supplemental
21 report. Okay?

22 Do you see that?

23 A. Thank you. Yes.

24 (Document marked for

1 identification as Exhibit

2 McCann-3.)

3 BY MS. McENROE:

4 Q. We're going to mark that as
5 Exhibit 3.

6 And today, if we're
7 referring -- today or tomorrow, if we're
8 referring to paragraphs and whatnot, in
9 any of the reports you've submitted, it's
10 probably easiest if we refer to this
11 version. But if you do want any of the
12 appendices or exhibits for completeness,
13 we can definitely arrange that. All
14 right?

15 A. Thank you. Thank you.

16 Q. So take a quick second and
17 look at that with me, just to make sure
18 that we are speaking the same language
19 here.

20 So the first cover sheet is,
21 as I said, the March 25th report, the
22 original report that you submitted,
23 correct?

24 A. Yes.

1 Q. Does that look familiar,
2 that's appropriate behind it, generally
3 speaking. You don't need to study it,
4 but --

5 A. Yes.

6 Q. -- that that's your report?

7 And this Page 35 we
8 included, that is the errata sheet we
9 just got this week correcting a figure?

10 A. Correct.

11 Q. In the chart, and in the
12 body?

13 A. Correct.

14 Q. And what you'll -- what
15 you'll see we've done is we've
16 paper-clipped it in. So if you want to
17 see the older one you can just flip it.

18 A. Thank you.

19 Q. Okay?

20 Then if you please keep
21 turning until you get to the first blue
22 slip sheet. That's your supplemental
23 expert report dated April 23rd; is that
24 correct?

1 A. Yes.

2 Q. And then please proceed
3 forward to the next blue slip sheet, is
4 your second supplemental expert report
5 dated April 15th, correct?

6 A. Yes.

7 Q. Why were you retained in
8 this litigation?

9 A. Because my firm had special
10 expertise in handling large datasets and
11 producing reliable results.

12 Q. In the securities setting?

13 A. In any setting. Data is
14 data.

15 Q. But in the security setting
16 in particular?

17 A. No, not necessarily.

18 Q. In any of the cases you've
19 done previously, have you ever worked
20 with ARCOS data?

21 A. No.

22 Q. Has anyone at your firm ever
23 worked with ARCOS data to your knowledge?

24 A. No.

1 Q. So let's turn in your first
2 report, your March 25th report to
3 Paragraph 10. And this is under a
4 heading that says "Assignment."

5 Do you see that?

6 A. Yes.

7 Q. And Paragraph 10 says, and
8 I'll try to read slow for Michelle: "I
9 have been asked by plaintiff's counsel to
10 document how I processed, validated and
11 augmented opioid transaction data
12 produced by the Drug Enforcement
13 Administration, DEA, and from the
14 defendants."

15 Did I read that correctly?

16 A. Yes.

17 Q. And that opioid transaction
18 data produced by the DEA you are talking
19 about, that's the ARCOS data?

20 A. Correct.

21 Q. Okay. The next Paragraph 11
22 says, "I have been asked to summarize
23 shipments in the ARCOS data, especially
24 those shipments into Cuyahoga County and

1 Summit County."

2 Did I read that correctly?

3 A. Yes.

4 Q. And then the third in your
5 assignment sections is, "I have also been
6 asked to report the results of applying
7 certain algorithms to the ARCOS data."

8 Did I read that correctly?

9 A. Yes.

10 Q. And does that section
11 accurately summarize your assignment in
12 this litigation?

13 A. As accurately, as fully as
14 three sentences can. If I were to, you
15 know, explain it a little bit more fully,
16 if I were to add three more sentences or
17 nine more sentences, it would be a more
18 complete description, but I think it's
19 a -- it's a good three-sentence
20 description of my assignment.

21 Q. So could you give me the
22 three more sentences of what's been left
23 out of this assignment so I can
24 understand, please?

1 A. Well, there's been nothing
2 left out. I'm just saying that I could
3 offer some more detail.

4 So for instance -- I haven't
5 thought through how I would write three
6 more sentences. I was trying to be as
7 succinct as possible there.

8 Q. Sure.

9 A. But for example, in the
10 third sentence I say, "I have also been
11 asked to report the results of applying
12 certain algorithms to the ARCOS data."

13 Now, later when we get to
14 that section of the report, you'll see
15 that those algorithms are -- are also
16 applied to some supplement from the
17 defendants' individual transaction data.

18 And the same thing with the
19 prior sentence where I write, "I have
20 been asked to summarize shipments in the
21 ARCOS data, especially those shipments
22 into Cuyahoga County and Summit County."

23 So I -- it is correct that I
24 do summarize the shipments in the ARCOS

1 data, but I also have included in some of
2 those summaries the individual defendant
3 transaction data. So those are two
4 examples where, if I wanted to add
5 another sentence or another phrase, I'd
6 make that discussion more complete.

7 Those would be some
8 examples. But I actually add those
9 details in the subsequent section. So I
10 think the three-sentence summary of my
11 assignment is fine the way it is.

12 Q. Great. And you had, when
13 I -- when I asked you earlier, asked
14 about why you had been retained. You
15 made reference to handling large
16 datasets, which, in my read, matches with
17 the explanation in the -- in the
18 assignment here in broad strokes.

19 Is there anything other than
20 handling datasets in some way that you're
21 trying to say is part of your assignment
22 in this litigation?

23 A. Not that I can think of as I
24 sit here.

1 Q. At this point you have been
2 focused on, and you mention in
3 Paragraph 11 here, Cuyahoga and Summit
4 Counties. Have you been retained by
5 plaintiffs with respect to any other
6 litigation in the opioids MDL, which is
7 the multi-district -- district litigation
8 that's organized in the Northern District
9 of Ohio, if you know?

10 A. I'm sorry, I need a little
11 bit of qualification --

12 Q. Sure. Absolutely.

13 A. -- in that -- in that
14 question.

15 Q. Let me -- let me ask it a
16 different way.

17 So Cuyahoga and Summit
18 Counties are discussed in your reports.
19 Do you know if you've been retained by
20 plaintiffs to provide any opinions or to
21 do any data handling for any other
22 plaintiffs --

23 MR. MOUGEY: Objection.

24 BY MS. McENROE:

1 Q. -- other than Cuyahoga and
2 Summit Counties?

3 A. Well, there's a -- that's a
4 compound question. And so without
5 misleading you, I'll just say yes. The
6 answer to that question would be yes.

7 Q. Have you been retained for
8 other federal cases, do you know?

9 MR. MOUGEY: Objection.

10 THE WITNESS: I'm not sure
11 as I sit here.

12 BY MS. McENROE:

13 Q. Have you been retained for
14 any state cases, opioid related?

15 A. I believe so.

16 Q. Which states?

17 A. We've handled some data for
18 a handful of states that I'll -- I'll
19 describe in a minute, I'll list to the
20 best of my ability in a minute.

21 I'm not sure whether --
22 well, I am certain that we have not been
23 retained as testifying experts in any of
24 those cases.

1 And I'm not completely sure
2 of -- of how much work we may have done
3 for one state versus another.

4 We have been retained to
5 provide summary reports like what you see
6 attached to the first report, what I
7 would call pharmacy reports or labeler
8 reports or distributor reports,
9 summarizing shipments into counties and
10 states.

11 We've been retained to
12 provide those preliminary high level
13 summaries to most of the states in the
14 country. And then we've been retained to
15 do a little bit of additional analysis
16 for three or four or five states,
17 Delaware, Oklahoma, Ohio, New York, and
18 Florida are the ones that come to mind,
19 those five, but varying greatly in how
20 much work we've done from almost nothing
21 to a little bit more than nothing.

22 Q. Aside from the reports that
23 we've already talked about today and
24 marked as Exhibits 2 and 3, have you

1 submitted any other expert reports in an
2 opioids-related litigation, whether it's
3 in federal or state court?

4 A. No.

5 Q. Are you engaged for any
6 other purpose in connection with the
7 opioids litigation? And what I mean by
8 that is, for example, to write discovery
9 responses on behalf of plaintiffs?

10 A. No.

11 Q. You're getting paid in
12 connection with your work on behalf of
13 plaintiffs in this litigation?

14 A. Yes.

15 Q. And \$475 an hour?

16 A. Yes, that's correct.

17 Q. Just --

18 A. I'm sorry.

19 Q. Oh, yeah. Go ahead.

20 A. That's not quite accurate.

21 I personally, I'm not being paid. My
22 firm is billing at \$475 an hour for my
23 time and at lesser amounts for staff
24 working on the project.

1 Q. You got my next question.

2 So you're billing through the Securities
3 Litigation and Consulting Group; is that
4 correct?

5 A. Correct.

6 Q. And if I call that SLCG,
7 you'll know what I'm talking about today?

8 A. Yes.

9 Q. What is your relationship to
10 SLCG?

11 A. I own it.

12 Q. You own it. Does anybody
13 else own part of it with you?

14 A. No.

15 Q. And are you the founder as
16 well of SLCG?

17 A. Yes.

18 Q. Are there any other
19 principals or partners with you?

20 A. Well, a principal or partner
21 is sometimes more of a marketing title
22 than a legal ownership. So there are
23 other people who we refer to as
24 principals. And I might refer to a peer

1 as a partner sometimes, but I'm the sole
2 owner.

3 Q. Are any other principals,
4 for marketing purposes or otherwise,
5 working on the opioid litigation along
6 with you from SLCG?

7 A. Yes.

8 Q. Who are they?

9 A. I think Mike Yan, Y-A-N.

10 Q. And what about Joshua
11 Mallett? Is he a principal?

12 A. I don't think we've attached
13 that marketing title to him but he has
14 worked on the project. That's correct.

15 Q. What about other SLCG staff
16 members? So Mike Yan as principal, and
17 Joshua Mallett presumably then as staff?

18 A. I just don't recall what
19 Joshua's title is. We could look at my
20 website -- at our website and it would
21 tell you what his title is. I'm not
22 recalling as I sit here. But in addition
23 to Mike and Joshua, Chuan, C-H-U-A-N,
24 Qin, Q-I-N, has worked on the project.

1 Regina Meng, M-E-N-G. Susan Song,
2 S-O-N-G. Briant with an I, B-R-I-A-N-T,
3 Lyu, I think his last name is L-I-U
4 (sic). There may be a couple of other
5 staff who have worked on the project,
6 Lanxi, L-A-N-X-I. And I apologize I'm
7 blanking on her last name. It's another
8 Chinese last name. Again, you'll find
9 her on our website. There may be one or
10 two additional names. But those are the
11 people that come to mind who have worked
12 on the project over the last year.

13 Q. Are they all still -- or I
14 should -- strike that.

15 Are they all employed by
16 SLCG?

17 A. Yes. I'm sorry. I thought
18 your question was SLCG employees who have
19 worked on the project.

20 Q. Correct. I just want to
21 make sure they are still employed, is my
22 question.

23 A. Yes, they are.

24 Q. Have they continuously been

1 employed since they worked on the project
2 as SLCG?

3 A. Yes.

4 Q. In your report, you wrote
5 that there was a range from 100 to \$350
6 for the staff from SLCG working on this
7 matter. Is that accurate?

8 A. Yes. It might be a little
9 bit tighter than that. I'm not sure that
10 anybody is -- anybody's billing rate is
11 \$100 an hour. The lowest billing rate
12 might be 125 or 135. I don't know. But
13 that range certainly covers it.

14 Q. And they get billed out and
15 the money then flows to SLCG; is that
16 correct?

17 A. Correct.

18 Q. And then they get paid some
19 salary, presumably, by SLCG?

20 A. Correct.

21 Q. And then you -- you
22 personally do profit somewhat from the
23 work that they've done on behalf of SLCG;
24 is that correct?

1 A. Yes. Of course there's a
2 lot more than just salary involved before
3 you get to me. But at the end of the
4 year, if there's anything left over it
5 comes to me.

6 Q. And that's true of the
7 amount that you get billed out at as
8 well; is that true?

9 A. Correct.

10 Q. Let's start with Mike Yan
11 just briefly. What is, in broad strokes,
12 his educational background? What's his
13 highest degree if you know?

14 A. Yes. He's got a Ph.D. in
15 applied mathematics from -- from UC
16 Davis.

17 (Brief interruption.)

18 MS. McENROE: Let's give it
19 one second. Off the record.

20 THE VIDEOGRAPHER: Off the
21 record.

22 (Whereupon, a discussion was
23 held off the record.)

24 THE VIDEOGRAPHER: We are

1 back on the record at 10:27 a.m.

2 BY MS. McENROE:

3 Q. So we were just talking
4 about Dr. Yan has a Ph.D. in applied
5 mathematics from UC Davis; is that
6 correct?

7 A. Yes. I believe it's applied
8 mathematics. If we looked at his bio and
9 his resumé on my website, it might be
10 applied statistics or applied
11 mathematics. And then he did a post-doc
12 for three years at Cal Tech.

13 Q. In what?

14 A. In the math department.
15 Teaching mathematics at Cal Tech.

16 Q. Do you intend him to testify
17 in this matter?

18 A. No. It's not for me to
19 intend, but I don't -- I don't anticipate
20 that happening.

21 Q. Joshua Mallett, is he a
22 Ph.D. as well?

23 A. No. He is what I think what
24 we call ABD, all but dissertation, in

1 accounting from the University of
2 Michigan.

3 Q. Chuan Qin, if I said that
4 correctly. What is that person's highest
5 level of education?

6 A. He also has a Ph.D. in
7 applied mathematics or applied statistics
8 from UC Davis.

9 Q. Regina Meng, her highest
10 level of education?

11 A. She has a master's degree in
12 finance. Might be styled a master's of
13 science in finance at University of
14 Maryland at College Park.

15 Q. Susan Song?

16 A. She has a -- same degree,
17 master's of science in finance from the
18 University of Maryland.

19 Q. Briant Lyu? Lyu? Is that
20 correct? I'm sorry.

21 A. After 20 years I'm still not
22 pronouncing these names right.

23 He has the same or similar
24 degree from John Hopkins. So...

1 Q. A master's?

2 A. A masters in finance or
3 master's of science in finance from the
4 University of -- from John Hopkins.

5 Q. And was it Lanxi? The last
6 name I wrote down.

7 A. Yes.

8 Q. And what is that person's
9 highest level of education?

10 A. It's the same degree. I
11 think it's from John Hopkins. It might
12 be from the University of Maryland. We
13 have to just look at our website or her
14 resumé to tell you for sure.

15 Q. Collectively, do you know
16 how many hours you have yet -- sorry.
17 Strike that.

18 Collectively, do you know
19 how many hours you have worked on the
20 opioids litigation altogether since your
21 engagement?

22 A. No.

23 Q. Can you give me a ballpark
24 estimate?

1 A. It would have a pretty big
2 range, if we were not to look at the
3 invoices or the billing records. But
4 it's varied from month to month since we
5 started a year ago. Some months as
6 little as 40 or 50 hours, some months as
7 much as 100 or 125 hours. And so it
8 would just be the sum of those numbers
9 that varied by a month, since we started
10 working on the project early on, maybe
11 even less than 40 or 50 hours. But most
12 of the months would be somewhere between
13 40 and 50 hours, and maybe as much as
14 125 hours.

15 Q. Have you yet invoiced
16 plaintiffs for your work on the opioids
17 litigation?

18 A. Yes.

19 Q. Okay. Have those invoices
20 been paid?

21 A. Yes.

22 Q. How much total, if you know?

23 A. I don't.

24 Q. Can you ballpark that?

1 A. Yes. Some months, as I
2 said, my own personal hours, there is a
3 significant variation. Some months as
4 little as maybe \$75,000 and some months
5 as much as 225- or \$250,000.

6 Q. For a month?

7 A. Correct.

8 Q. And that's just from your
9 time?

10 A. No. That's -- you are
11 asking about the firm.

12 Q. Oh yeah. Got it. Okay.

13 A. So that would be the firm.

14 Q. Yeah. And do you have an
15 estimate on the hours that your staff,
16 the SLCG staff has worked on this matter
17 so far?

18 A. In hours or dollars?

19 Q. I was going to ask both. So
20 both would be great.

21 A. Well, the easiest way for me
22 to think about it is in -- in dollars
23 working back from the answers that I just
24 gave you.

1 Q. Sure.

2 A. Right. So my -- my
3 involvement at 40 or 50 hours is 15- or
4 \$20,000 at \$475 an hour; as much as 60-
5 or \$70,000 at 125 hours a month. So my
6 time has been roughly proportionate, I
7 think, with other people's time. So if I
8 billed 20- or \$25,000 in a month, it's
9 like that would be likely one of the
10 months where we were less active, maybe
11 early in the project. And so if the
12 invoice was \$75,000, other staff put in
13 perhaps \$50,000 worth of time in those
14 lesser activity months.

15 Just ballparking it at \$200
16 an hour, that would be maybe 250 hours.
17 And then we did the --

18 Q. Collectively or for separate
19 individuals?

20 A. Oh no, collectively. I have
21 no idea individuals. You know, we would
22 have to look at the records to tell you.
23 I'm just trying to give you --

24 Q. Sure.

1 A. -- the best estimate I can
2 as I sit here.

3 And then you do the same
4 arithmetic for the higher activity
5 months. If I put in 125 hours, that
6 would come to 50- or \$60,000. And if in
7 total we billed \$225,000, it would be
8 another 150- or \$160,000 of staff time,
9 that would be roughly 800 hours.

10 So I -- I'm just giving you
11 very broad ranges and estimates based on
12 what I think as I sit here.

13 Q. Thank you.

14 And does that staff, they
15 work at your direction; is that correct?

16 A. Yes.

17 Q. You oversee their work?

18 A. I do.

19 Q. You check their work?

20 A. I do.

21 Q. And you approve their work?

22 A. I do.

23 Q. And you are adopting some of
24 their work in the opinions you've

1 expressed in this litigation?

2 A. Yes.

3 Q. Are you involved in hiring

4 the staff?

5 A. I am.

6 Q. And interviewing them?

7 A. Yes.

8 Q. Aside from your hourly rate

9 and the hourly rate of the other SLCG

10 employees, are you otherwise being

11 compensated in any way in connection with

12 the opioids litigation?

13 A. No.

14 Q. You haven't been paid

15 anything else or promised anything else?

16 A. Of course not.

17 Q. Okay. Do you have any

18 outstanding invoices at present?

19 A. Just the most recent one.

20 Just the one that I submitted a week ago

21 for -- for April.

22 Q. And how much was that one?

23 A. I don't remember.

24 Q. What did you do, if

1 anything, to prepare for today's
2 deposition?

3 A. Well, I did a year's worth
4 of work and supervised my staff doing
5 that work.

6 I wrote a significant report
7 and two smaller supplements. I, as part
8 of that, reviewed a lot of material, did
9 a lot of analysis. And then more
10 recently went over some of that with --
11 with attorneys in my office and with my
12 staff.

13 Q. I want to ask you a couple
14 questions about what you just said. So
15 you said attorneys in my office. Does
16 SLCG employ attorneys, or is it that
17 outside attorneys came and physically
18 were in your office?

19 A. We don't employ attorneys.
20 It's employee -- lawyer -- sorry, we
21 don't employ lawyers. What I meant to
22 refer to there is attorneys coming to my
23 office to discuss the deposition.

24 Q. Who?

1 A. So there would be three:

2 Page Poerschke, Ty or Tyler Hudson, and
3 Jeff Gaddy, G-A-D-D-Y.

4 Q. When was that?

5 A. I may not get the date
6 exactly right, but two weeks ago today
7 for part of the day, one week ago today
8 for part of a day, and yesterday for a
9 part of the day.

10 Q. Aside from the three
11 attorneys you named, have you met with
12 any other attorneys to prepare for your
13 deposition?

14 A. No. Over breakfast this
15 morning, I -- I had coffee with
16 Mr. Mougey, but I wouldn't call that
17 preparing for my deposition.

18 Q. And going back to your
19 answer before, about what you did to
20 prepare for today's deposition. You
21 mentioned that you reviewed a lot of
22 material, separate from just reviewing
23 your report. What were you referring to
24 there?

1 A. Well, as I describe in the
2 report, we received data and documents
3 starting back as early as April of last
4 year, maybe even just a little bit before
5 that. I'm not 100 percent clear on that
6 as I sit here. But since 13 months ago,
7 we were receiving documents and data.
8 And that's what I was referring to when I
9 said that I reviewed a lot of material.

10 Q. Are the materials you're
11 referring to listed in your reports?

12 So we can take a look. You
13 have in front of you your March 25th
14 report. If you flip back a page, to
15 Section 2, "Materials Reviewed." You'll
16 see there's a section here listing a
17 number of things.

18 Is this the description,
19 combined with the materials reviewed
20 sections in the two supplemental reports
21 that you're referring to?

22 A. Well, it may not be
23 exhaustive of everything I've looked at
24 over the last 13 months. But it's what

1 came to mind as material I reviewed or
2 considered as I was writing these
3 reports. I -- there's not anything
4 necessary for the results that I report
5 in this report that I know of, as I sit
6 here. If -- if there is -- there may be
7 additional items, as I say in
8 Paragraph 9(m), additional items in
9 footnotes, referred to in the text below.

10 Other than what's in this
11 paragraph and those items in the text and
12 footnotes, I'm not aware of anything
13 else.

14 Q. Just so the record is clear,
15 aside from documents or items cited in
16 your reports, did you consider any other
17 materials in forming your opinions in
18 this case?

19 A. I don't recall. Not that
20 I'm sitting -- not that I can think of as
21 I'm sitting here.

22 Q. Okay. Have you ever seen
23 any deposition transcripts from this
24 case?

1 A. No, I don't think so.

2 Q. Have you ever asked to see
3 any deposition transcripts from this
4 case?

5 A. No.

6 Q. We've collected up your
7 reports. And I know we've marked the
8 full set of them. Do these -- do -- do
9 your reports represent the full sum of
10 opinions you intend to offer in this
11 litigation?

12 A. With some minor
13 qualifications, there might be some small
14 qualitative differences between the
15 opinions that I would ultimately express
16 and what's included here.

17 And then of course whatever
18 the court requests. If the court
19 requests any additional analysis, or if
20 it's determined some additional analysis
21 would be helpful to the court, I fully
22 intend to, of course, do that work and
23 offer those opinions.

24 Q. What small qualitative

1 changes do you anticipate making before
2 trial?

3 A. Well, for instance, when
4 we -- when I -- I discuss the defendants'
5 transaction production, I identify a
6 number of defendants whose production
7 seems to fall short of what they were
8 submitting to ARCOS in realtime.

9 Over the last few months as
10 a result, I think, of requests from
11 plaintiff's counsel, defendants have been
12 supplementing that production after my
13 initial report was filed. In fact, just
14 yesterday, one of the distributors
15 produced the data that we had identified
16 was missing from their earlier
17 production.

18 There are still other
19 defendants that have not filled in gaps
20 in their transaction data, at least where
21 we think there are gaps. So that would
22 be an example where there might be some
23 slight quantitative changes to the
24 opinions that are expressed if the

1 defendants continue to produce data as
2 they did yesterday.

3 But I don't anticipate that
4 production to change the opinions that
5 I've expressed here.

6 In fact, the production
7 yesterday I think further strengthens one
8 of the core opinions.

9 Q. Aside from some productions
10 being made later in time, with respect to
11 the documents and data and information
12 that was available to you when you
13 already issued your reports, do you
14 anticipate making any small qualitative
15 changes prior to trial?

16 A. Well, not that I know of as
17 I sit here. But I'm humanly imperfect.
18 As we discussed before we went on the
19 record, there was a small -- maybe we
20 discussed it on the record. There was a
21 small errata to Table 15. And so it
22 doesn't change the opinions in any way at
23 all. But there was one -- one number in
24 the text that needed to be edited and a

1 table where a few numbers needed to be
2 edited. So there may be examples like
3 that that I'm not aware of. But there's
4 nothing as I sit here, nothing that I'm
5 aware of where there would be some,
6 again, very small de minimus edit or two.

7 Q. Let's take a look at that
8 page, 35, that errata sheet.

9 A. Sure.

10 Q. And we did our best to print
11 it out. So you can see up in the text
12 there's a strikethrough --

13 A. Yes.

14 Q. -- on a portion of that
15 figure. And that figure has been updated
16 in the Table 15 down below; is that
17 correct?

18 A. Correct.

19 Q. Have there been any other
20 changes to this Page 35? That was the
21 only one that I had seen, those two,
22 without spending a lot of time studying
23 the whole thing.

24 A. Well, if you look across the

1 bottom of Table 15, you'll see in the
2 number of transactions in the report. It
3 says 542,898.

4 Q. Yeah.

5 A. The software and the data
6 that we gave you produces a table that
7 says 542,900. So that's an example of
8 what I think is a truly trivial change.

9 It's maybe a couple of
10 thousandths of one percent difference.
11 And as you read across you'll see the
12 same thing with the MME. The difference
13 there is 300 and -- sorry, 435 MME on
14 four billion MME.

15 So there are very tiny, tiny
16 differences between Table 15 on the
17 errata page and Table 15 that had been
18 put in as a draft in the report in which
19 I hadn't updated.

20 So that's an example where
21 there may be a number that I would change
22 by a few hundredths of a percent or even
23 a few thousandths of a percent. I can
24 explain why that might be.

1 But other than that sort of
2 thing, I don't -- I don't anticipate
3 changing anything other than changing it
4 as a result of the continued production
5 by the defendants.

6 The very next page, Page 36,
7 illustrates that. Figure 3 on Page 36
8 will have to be changed because of the
9 data that was produced yesterday.

10 Q. So how did errata -- the
11 errata of Page 35 come to be? Did you
12 make -- type in these changes?

13 A. No.

14 Q. Who did?

15 A. Well, the code that we gave
16 you, we actually gave you two pieces of
17 code and two data files that create Table
18 15 for Cardinal Health. This table
19 refers to Cardinal Health.

20 And in the production of
21 data and code to you, we gave you two
22 versions -- inadvertently gave you an
23 earlier version of the code and data that
24 produced the version of the table that is

1 in the report. And there had been some
2 very slight modification to the data or
3 code. And we gave you that as well. And
4 so what we did was we ran the code that
5 we gave you. And it produces an Excel
6 tab that has the content of Table 15.
7 And then someone in my office, Joshua
8 Mallett, I believe, copied and pasted
9 that content which is an Excel file tab
10 into this table.

11 And then I, I believe,
12 struck through the 2336 in Paragraph 86
13 which should obviously be 1618.

14 Q. Did you type the remainder
15 of your report, the body of it?

16 A. Virtually all of it.
17 Some -- some portions of it may have been
18 first -- some words, or even sentences
19 may have been first typed by someone else
20 in my office.

21 Q. Anyone in particular or just
22 one of the people working with you?

23 A. No one in particular. I
24 think I wrote every sentence that's in

1 this report. And in fact I certainly of
2 course adopt every sentence that's in
3 this report. But I either wrote it from
4 beginning to period or someone else wrote
5 some version of a sentence that I edited.

6 Q. We talked a couple minutes
7 ago about your assignment in this matter.
8 Do you remember that?

9 A. Yes.

10 Q. Who delivered that
11 assignment to you? I'm looking back, if
12 it's helpful, on Page 4 at Paragraphs 10,
13 11 12. It says, "I have been asked by
14 plaintiff's counsel," to start out.

15 So I'm just wondering who
16 actually that was that delivered that
17 assignment to you?

18 A. I don't recall it being
19 conveyed by any individual, but rather an
20 understanding that I developed as a
21 result of discussions with attorneys over
22 the past six months -- past, yeah, six
23 months maybe and -- which I summarized in
24 my own words in these three sentences.

1 Q. From whom did you develop
2 that understanding?

3 A. From interactions with
4 primarily three or four lawyers.

5 Q. Who?

6 A. Maybe -- in total I may have
7 interacted with a dozen lawyers that
8 informed my summary of what my assignment
9 was. But I would say -- I would say
10 primarily Mr. Mougey.

11 Q. You said three to four, from
12 the interactions primarily with three to
13 four. So besides Mr. Mougey, who are the
14 other two to three?

15 A. I'm not sure to what extent
16 these others might have informed my
17 understanding of what I was being asked
18 to do. But over time I spoke to Paul
19 Farrell, F-A-R-R-E-L-L, Mike Fuller.
20 Page Poerschke, Tyler Hudson, Joe Rice.

21 And then on the -- more on
22 the periphery, just other people that I
23 interacted with this on this project over
24 the last six months.

1 Q. Can you list them for me,
2 please, that you can remember?

3 A. Do you need an exhaustive
4 list of who I've interacted with or who I
5 think I interacted with that might have
6 informed my understanding of the
7 assignment?

8 Q. Yes, good question. So
9 throughout you've made reference to
10 plaintiffs' counsel. And I'm just trying
11 to get an understanding, when you do
12 that, to whom you are referring.

13 A. Well, my primary point of
14 contact was Mr. Mougey, although I did
15 have interaction with others, including
16 the ones that I've just identified for
17 you.

18 Q. Did you speak directly with
19 anyone from Cuyahoga County?

20 A. Not that I'm aware of.

21 Q. Summit County?

22 A. Not that I'm aware of.

23 Q. The City of Akron?

24 A. Not that I'm aware of.

1 Q. City of Cleveland?

2 A. Not that I'm aware of.

3 Q. Did you speak with anyone
4 other than plaintiffs' counsel to form
5 any opinions or understandings you had
6 about any facts in this case?

7 A. Yes.

8 Q. Who?

9 A. Well, my staff.

10 Q. Okay. Outside of your staff
11 and outside of plaintiffs' counsel, did
12 you discuss anything with anyone in
13 connection with this case?

14 A. If that connects up to your
15 prior question, the answer would be no.

16 Q. Not connecting up to my
17 prior question. So just as a brand new
18 question. Aside from plaintiffs' counsel
19 and aside from other of your staff, have
20 you discussed the opioids litigation with
21 anybody else?

22 A. Yes.

23 Q. Who?

24 A. I don't remember their names

1 but there have been other consultants to
2 the plaintiffs. Maybe a nonlawyer
3 employee of Levin Papantonio or one of
4 the other firms, and then maybe outside
5 consultants, maybe some other testifying
6 experts.

7 But none of those
8 interactions informed my understanding of
9 my assignment or any of the conclusions
10 that I reached.

11 Q. You mentioned that you maybe
12 spoke with outside consultants for
13 plaintiffs. With whom did you speak?

14 A. I don't recall the names.
15 But early on, there were some who I -- I
16 think to be former DEA employees.

17 Oh, I should also add, very
18 early on, we spoke to some current DEA
19 employees about the data.

20 Again, I don't think that
21 any of those discussions affected my
22 understanding of my assignment or the
23 opinions that I expressed, but for
24 completeness, it would include those two

1 categories at least.

2 Q. Do you recall the names of
3 any of the former or current DEA
4 employees with whom you spoke?

5 A. I think if you mention the
6 names it would prompt my memory. But the
7 only one that comes to mind is
8 Mr. Rafalski. But there were two or
9 three others. And the conversation that
10 I had with current DEA employees was just
11 a very brief telephone conference back in
12 March or April of last year, so 13 or
13 14 months ago, about the data we were
14 going to receive, what -- what format it
15 would be in, what size it would be. A
16 little bit of explanation, kind of a
17 preliminary description of the fields
18 that might be in the data.

19 That was a very short call.
20 There were three or four people from the
21 DEA on the call. One person seemed
22 particularly knowledgeable about the
23 data. The entire call -- with -- with
24 attorneys on the call as well, but the

1 entire call was six or eight or
2 ten minutes. That's the only interaction
3 I'm aware of.

4 Q. You mentioned that there
5 were attorneys on that phone call with
6 the DEA you were just talking to. Was
7 that counsel for plaintiffs, counsel for
8 defendants, both, do you know?

9 A. I think it was counsel for
10 plaintiffs and counsel at the DEA.

11 Q. You mentioned in addition to
12 that you maybe spoke to outside
13 consultants that you also maybe spoke to
14 outside experts. You mentioned
15 Mr. Rafalski. Anybody else that comes to
16 mind in terms of plaintiffs' experts with
17 whom you've spoken?

18 A. Yes.

19 Q. Who?

20 A. I recognize three names, I
21 think, who may or may not have filed
22 expert reports. But a Professor
23 Rosenthal, Professor Cutler, and a
24 Ms. Keller. There may be others, but

1 those are the names that come to mind as
2 people who may have filed expert reports
3 in this case as well.

4 Q. When did you speak with
5 Mr. Rafalski?

6 A. I believe he was in my
7 office very early on in the process in
8 April or May of last year. And then I
9 believe he was in my office more recently
10 in the last couple of months.

11 He was -- I think he has
12 family in the area and he wanted to
13 borrow my conference room. So I didn't
14 have any substantive discussion with him
15 that last time. But he -- he has been in
16 my office once in the last few months to
17 spend a day in my conference room
18 working.

19 Q. In terms of substantive
20 discussions with Mr. Rafalski regarding
21 the opioids litigation, was it just the
22 one conversation you had with him in your
23 office early on in April of May -- April
24 or May?

1 A. I don't recall if he was in
2 my office just once or if he was in my
3 office twice.

4 The first time I believe
5 there were four individuals and
6 Mr. Rafalski is the only name I
7 recognize. And then later there were two
8 or three of that same -- a subset of the
9 first group that had been in my office.
10 And I don't recall whether Mr. Rafalski
11 was one of them or not.

12 Q. When you say there were four
13 individuals, to whom are you referring,
14 yourself, Mr. Rafalski and who else?

15 A. No, I'm sorry. When I -- I
16 was referring to four individuals, I
17 mean -- my recollection now, 13 or
18 14 months ago, is that when we first got
19 the data, there were three or four former
20 DEA employees in my office to help us
21 understand at a high level what the data
22 was, we were looking at.

23 THE COURT REPORTER: If
24 counsel on the phone can actually

1 mute themselves? We're getting a
2 lot of feedback here. Thank you.

3 BY MS. McENROE:

4 Q. And you don't remember who
5 those DEA agents were, correct, former
6 DEA agents?

7 A. I remember their faces. I
8 don't remember their names. I'm sorry.

9 Q. Did you ever provide
10 anything in writing to Mr. Rafalski?

11 A. No.

12 Q. Did you ever provide him
13 with any computer code or data?

14 A. No, not to my knowledge.

15 Q. Did you show him computer
16 code or data when he was in your office?

17 A. Not personally. Although,
18 the purpose of him being there, I think,
19 wasn't my request. I'm inferring what
20 the purpose was. But I think the purpose
21 was to look at the data as it was coming
22 in from the DEA.

23 It came in in -- in three or
24 four tranches. And when we first got the

1 data, I think they were there to help us
2 understand what the data fields were.
3 Some description in the ARCOS handbook.
4 But there's more data in the production
5 than in the -- described in the ARCOS
6 handbook.

7 And so my recollection is we
8 have a very large computer monitor, but
9 it's -- think of it like a television,
10 40-inch computer monitor, so that we
11 could display all of the data.

12 And so he was probably
13 looking at data on the screen. I don't
14 recall him looking at -- at any code.
15 And the only data that I recall him
16 looking at was as it would be displayed
17 on a computer monitor, as we opened the
18 files we received from the DEA.

19 Q. You mentioned you spoke with
20 Professor Rosenthal. When was that?

21 A. I actually don't recall
22 speaking with her. If I said it that
23 way, I was being imprecise.

24 I was in a meeting sitting a

1 few chairs down from Professor Rosenthal,
2 and I don't recall either her or I
3 speaking. She may have spoken a little
4 bit. And so I think I said hello as
5 we -- as we went to get a bagel or a
6 coffee at a break. But I -- so I met
7 her. I don't recall speaking to her
8 other than hello, I'm Craig McCann.

9 Q. Who else was in that
10 meeting?

11 A. I think Professor Cutler was
12 there.

13 Q. Is that when you spoke with
14 Professor Cutler?

15 A. Yes. And again I'm not
16 really sure I spoke to him other than
17 saying I -- I was in the same room as the
18 two of them, so I know their names. And
19 I -- if I interacted with them, it was --
20 it was kind of just civil talk getting
21 some lunch.

22 Q. And is that when you also
23 interacted with Ms. Keller?

24 A. I interacted with her more

1 than on that occasion. But I did
2 interact with her on that occasion as
3 well, and about the same level, just to
4 say hello, how are you today.

5 Q. Aside from Professor
6 Rosenthal, Professor Cutler, and
7 Ms. Keller, was anybody else in that
8 meeting?

9 A. Yes.

10 Q. Who?

11 A. My recollection is it was a
12 large group, approximately 30 or 40
13 people. They were strangers to me, other
14 than a few people, as Professor Cutler
15 and Professor Rosenthal were strangers to
16 me, but I -- I recall the name.

17 Mr. Mougey was there.

18 Mr. Rice was there. Mr. Farrell was
19 there. I think Ms. Singer from Joe
20 Rice's office was there.

21 And then there were a
22 Mr. Sobol, S-O-B-O-L. And -- and then
23 some other people, whether they were
24 consultants or lawyers, I -- I don't

1 know. They were strangers, and I didn't
2 interact with them.

3 I was only there myself for
4 a couple of hours in a room about the
5 size of this room, maybe a little bit
6 smaller with a similar intimidating
7 number of people.

8 Q. When was this meeting?

9 A. I'm not sure. It was
10 sometime last year. Maybe in the summer,
11 but whether it was the early summer or
12 the late summer, I don't recall.

13 Q. Beside Professor -- I'm
14 sorry.

15 Aside from this one meeting,
16 had you spoken to Professor Rosenthal or
17 Cutler separately at all?

18 A. Never.

19 Q. Have you ever e-mailed with
20 them or had any other interactions with
21 them?

22 A. Never.

23 Q. You mentioned that you had
24 more interactions with Ms. Keller than

1 that one meeting. What are those other
2 interactions just in broad strokes, and a
3 little quickly if we could?

4 A. Ms. Keller attended a couple
5 of other meetings that I attended. I'm
6 not sure whether it's two or three. And
7 we interacted a little bit otherwise in
8 the presence of the attorneys, either via
9 e-mail or on conference calls, as -- as
10 we were working on the ARCOS data.

11 Q. You say as we were working
12 on the ARCOS data. What role, if any,
13 did Ms. Keller play in your opinions?

14 A. None.

15 Q. Did you provide Ms. Keller
16 with any data or code?

17 A. Not directly. I don't know
18 whether counsel provided Ms. Keller with
19 any data that we processed or developed.

20 Q. Just a couple quick
21 questions and then I'd like to move on if
22 we could. You made some references to
23 having interacted with other consultants.

24 In connection with this

1 litigation, did you ever interact with
2 Compass Lexecon?

3 A. Yes.

4 Q. Okay. And what was the
5 nature of those interactions?

6 A. There were either one or two
7 brief conference calls with -- with one
8 or more of the plaintiffs' attorneys and
9 one or more consultants from Compass
10 Lexecon.

11 Q. Did they play any role in
12 the formation of your opinions or the
13 preparation of your reports?

14 A. No.

15 Q. What about Greylock
16 McKinnon, did you ever interact with them
17 in connection with the opioids
18 litigation?

19 A. Yes.

20 Q. Please describe the nature
21 of that interaction.

22 A. It was similar to the
23 interaction with Compass Lexecon. There
24 was one -- one very brief conference call

1 hosted by one of the plaintiffs'
2 attorneys, Mr. Sobol I think. And they
3 provided us with some IQVIA data --
4 I-Q-V-I-A data -- which we reviewed but
5 did not inform any of my opinions.

6 Q. What about the Pacific
7 Institute of Research and Evaluation?

8 A. No.

9 Q. When did you decide to
10 supplement your report the first time?
11 Again, if it's helpful to you, we can
12 turn to the first supplemental report, is
13 dated April 3rd, 2019.

14 A. There's only eight or
15 ten days between these two. So in the
16 first few days after the main report was
17 filed, I was contacted and told that
18 some -- some of our early work product,
19 graphs or tables from the ARCOS data, had
20 been used in depositions, and the
21 attorneys wanted me to supplement the
22 report adopting that work product. It is
23 our work product, but to acknowledge
24 that.

1 And I believe that there was
2 some additional tables that could be
3 calculated, prepared, from the material
4 that's in the initial report, but we
5 hadn't produced it -- those tables in
6 that format, these highly summarized
7 tables.

8 And as I understood it, the
9 summaries of what we produced in the
10 initial report were being used by another
11 expert and we were asked to -- to create
12 the summaries -- recreate the summaries
13 from the underlying analysis in the
14 initial report.

15 So it all happened in a few
16 days after the initial report. We were
17 asked to make those two supplements.

18 Q. When you submitted your
19 March 25th report, did you already intend
20 to supplement at a later time?

21 A. No.

22 Q. You mentioned that you were
23 contacted and told regarding the use of
24 some of the materials at depositions, who

1 contacted you? Plaintiffs' counsel?

2 A. Oh, yes. I believe

3 Ms. Poerschke, but I'm not 100 percent

4 certain.

5 Q. You mentioned that in

6 addition to the deposition materials, you

7 also included some highly summarized

8 tables. When did you make those tables,

9 you or somebody else at your firm?

10 A. Oh, shortly before

11 April 3rd, 2019. In the -- in the few

12 days preceding that date.

13 Q. So those were prepared

14 between the March 25th report and when

15 those highly summarized tables came out

16 in the supplemental report on April 3rd?

17 A. Correct.

18 Q. And you mentioned that some

19 of your summary tables you came to

20 understand were being used by another

21 expert. Which expert?

22 A. I'm not 100 percent certain,

23 but I think it is Professor Cutler.

24 Q. When did you decide to

1 submit your second supplemental report?
2 And if it's helpful, the next blue sheet
3 will be in front of the second
4 supplement. And that's dated April 15,
5 2019.

6 MR. MOUGEY: Anybody is on
7 the phone, if y'all can just mute
8 it. The noise continues to come
9 through.

10 Thanks.

11 BY MS. McENROE:

12 Q. I can refine that question a
13 little bit more.

14 Did you decide to
15 supplement, with your second supplemental
16 report, after March 25th?

17 A. Oh, yes, definitely.

18 Q. Did you decide to supplement
19 with your second supplemental expert
20 report after April 3rd?

21 A. Yes.

22 Q. When did you do the work
23 that's reflected in the second
24 supplemental expert report?

1 MR. MOUGEY: Guys, somebody
2 is still not on mute. If anybody
3 can double-check who's not on
4 mute. But there's continuous
5 noise that's coming through.

6 THE WITNESS: I'm sorry.
7 Could you ask that again, please.

8 BY MS. MCENROE:

9 Q. Absolutely. So when did you
10 do the work that's reflected in the
11 second supplemental report?

12 A. Well, the underlying work
13 goes back six, eight, ten months, right,
14 because it's based on the analysis that
15 was already done and reported out. In
16 the March 25th report there is some
17 additional work and it was done in the
18 first two weeks of April. But most of
19 it, most of the work that is underlying
20 that second supplement is work that was
21 done prior to March 25th. It was just
22 addressing a different question.

23 We were asked to take the
24 data and the analysis that we previously

1 had done and address a slightly different
2 question with the data. But most of the
3 sort of underlying work had been done
4 over the prior year.

5 Q. Prior to the period between
6 April 3rd and April 15th when you were
7 running the reports that ended up being
8 reflected in the second supplemental
9 expert report, had you been processing
10 data regarding the manufacturers as is
11 now reflected in the second supplemental
12 expert report, or did that all start in
13 that more narrow window?

14 A. We had done some work
15 related to the manufacturers,
16 memorialized in the March 25th report.
17 And so some work done related to
18 manufacturers before March 25th.

19 Q. But of the information
20 that's more uniquely in the second
21 supplemental report, is that a new set of
22 work that you did during that more narrow
23 period of time, the April 3rd to
24 April 15th window?

1 A. Well, there is some
2 additional work. As I said, we had done
3 a lot of work related to the
4 manufacturers, a lot of it reported out
5 in the initial report. And I was asked
6 to provide answers to some questions that
7 that prior work would inform, but hadn't
8 been posed to me before sometime after
9 March 25th.

10 Q. Aside from maybe having
11 forgotten to include certain materials in
12 your first supplemental report, is there
13 any reason why what's contained in your
14 first supplemental report could not have
15 been included in your March 25th report?

16 A. I would take some of the
17 color out of your question. I didn't say
18 that I forgot to include something in the
19 initial report. But there's some
20 material there that was not included in
21 the initial report, like a discussion of
22 those demonstratives used in the
23 deposition, or the highly summarized
24 tables reflecting material that was in

1 the March report.

2 So kind of setting aside
3 some of the context that you put in your
4 question, I would say that if -- if I had
5 thought of or been instructed to include
6 the material that's in that first
7 supplemental, it could have been included
8 in the first report.

9 Q. And same would be true of
10 the materials included in the second
11 supplemental report, correct?

12 A. Well, it's a little
13 different. There's -- there's very
14 little additional work or thought in the
15 supplemental report. So it's material
16 that didn't require a lot of additional
17 work to produce the first supplemental.

18 The second supplemental
19 involves more substantial thought on my
20 part and work on my staff's part.

21 So I wouldn't say that as of
22 March 25th, if we had been asked to
23 produce the content that's in the second
24 supplemental report, we could have done

1 it that day.

2 I think that it's probably
3 true for the first supplemental report,
4 that if we had thought to include those
5 summary tables or to adopt the
6 demonstratives used in the deposition,
7 that could have been done quickly and
8 included in the initial report.

9 Q. But is there any reason why
10 you could not have done the analysis you
11 did for the second supplemental report
12 earlier, such that that result could have
13 been reflected in the March 25th report?

14 A. I'm sorry, what do you mean
15 by any reason?

16 Q. So for example, we can take
17 a look. In the second supplemental
18 report at Paragraph 2, you have materials
19 considered -- sorry, materials reviewed,
20 specific to the second supplemental
21 report adding some things.

22 None of those came to exist
23 for the first time after March 25th but
24 before April 15th, correct?

1 A. Correct.

2 Q. So you could have been
3 provided with this instruction and these
4 materials previously and could have
5 potentially included the opinions in your
6 second supplemental report in your
7 March 25th report, correct?

8 A. Yes.

9 MS. McENROE: We've been
10 going for about an hour. Take a
11 quick break?

12 MR. MOUGEY: That sounds
13 good. What -- what's your
14 definition of quick?

15 MS. McENROE: Let's go off
16 the record.

17 THE VIDEOGRAPHER: Off the
18 record at 11:18 a.m.

19 (Short break.)

20 THE VIDEOGRAPHER: We are
21 back on the record at 11:31 a.m.

22 BY MS. McENROE:

23 Q. I'd like to direct your
24 attention in your March 25th report to

1 Page 3, which is a continuation of
2 Paragraph 9, which has a list of
3 materials reviewed. Let me know when
4 you're there.

5 A. Yes.

6 Q. Great. And take a look at
7 the next page, it's a continuation of
8 that list.

9 And Item I you have listed
10 as Masters Pharmaceutical, Inc., versus
11 Drug Enforcement Administration; is that
12 correct?

13 A. Yes.

14 Q. When did you first read
15 Masters?

16 A. Last spring or summer.
17 Approximately a year ago.

18 Q. Do you rely on it in any way
19 in issuing your expert opinions?

20 A. No, I don't think so.

21 Q. You are not a lawyer,
22 correct?

23 A. Correct.

24 Q. You don't apply caselaw in

1 your analysis in your expert reports?

2 A. I don't. If I do, it's
3 inadvertent.

4 Q. Okay. You also don't
5 have -- you do not have listed here the
6 Controlled Substances Act; is that
7 correct?

8 A. Correct.

9 Q. Did you review that in whole
10 or in part in connection with the opioids
11 litigation work you've done?

12 A. If I did, I don't recall.

13 Q. Did you rely on it in any
14 way with respect to any of the opinions
15 you've put forth?

16 A. No.

17 Q. So you didn't review
18 Title 21, Section 1301.74(b) from the
19 Code of Federal Regulations, correct?

20 A. Not that I'm aware of. If
21 you put it in front of me, I may
22 recognize the text. But I don't -- I
23 don't recall it by that citation.

24 Q. Well, did you rely on any

1 regulations in connection with forming
2 the opinions in your expert reports?

3 A. Not directly. There may be,
4 at a second remove, an impact of a -- a
5 regulation on my thinking. But -- the
6 data, but not -- not directly.

7 Q. What do you mean by second
8 remove impact?

9 A. Well, at a high level what I
10 think I did was to determine whether the
11 transactions that the defendants reported
12 to the DEA in realtime match the
13 transactions that they report to the
14 court in this case.

15 And there's a couple of
16 different ways of thinking about that,
17 framing that exercise.

18 Q. Sure.

19 A. But I understand that the
20 defendants are required by regulation or
21 law to report those transactions timely
22 and accurately to the DEA through ARCOS.
23 And so one interpretation of what I did
24 was to -- to take the transactions that

1 the defendants produced in this case, and
2 determine whether the defendants produced
3 their actual transactions in these 14
4 opioids. And a way to do that is to say,
5 well, in addition to whatever
6 responsibility the defendants have to the
7 court in this case, they had separate
8 from that in realtime, a responsibility
9 to report the transactions to ARCOS. And
10 so I then compare those two datasets.

11 So when I say sort of at a
12 second remove, regulation may impact my
13 opinion, it's at a -- a tenuous
14 connection. What I'm really doing is
15 just comparing two datasets. But my
16 thinking about that is probably informed
17 by an understanding that the defendants
18 both had a responsibility to the court,
19 and then, through regulation, had a
20 responsibility to accurately and timely
21 report their transactions.

22 Q. When you say responsibility
23 of the court, you are talking about in
24 discovery in this litigation?

1 A. Yes.

2 Q. And you made mention that
3 defendants are required by regulation to
4 report their data timely and accurately.
5 Are you referring to ARCOS when you made
6 that statement?

7 A. Yes.

8 Q. Are you making any opinions
9 in any of your expert reports whether any
10 defendant did or did not comply with
11 their reporting obligations vis-a-vis
12 ARCOS?

13 A. I don't think so. It's
14 certainly not an opinion that I
15 expressed. We see some gaps in the ARCOS
16 data. But I don't know if that result --
17 if that resulted from a defendant not --
18 not timely reporting transactions or not.
19 That's a slightly different question.

20 Q. When you interacted with
21 current or former DEA personnel with
22 respect to the ARCOS data, did any of
23 them tell you that any of the defendants
24 did not meet their obligations with

1 respect to reporting ARCOS data?

2 A. No.

3 Q. Are you making any opinions
4 in any of your expert reports about
5 defendants' failure to comply with their
6 discovery obligations in this litigation?

7 A. Well, it's not an opinion.
8 I think some of our observations have
9 informed further discovery production.
10 And I expect may continue to.

11 AmerisourceBergen provided
12 data yesterday in discovery that we
13 identified in the March 25th report
14 hadn't been produced before. So I
15 don't -- that's not an opinion really,
16 but it -- it is a comment on the
17 discovery, at least the production that
18 we've received. And I expect there may
19 be more production. But it's not -- it's
20 not opinion.

21 Q. Okay. You didn't list in
22 your materials considered any, what we
23 call "dear registrant" letters which are
24 letters from the DEA to registrants

1 regarding suspicious order monitoring.

2 Did you review any in connection with
3 forming any of your opinions?

4 A. Not that I recall.

5 Q. Okay.

6 A. I'm sorry, the answer would
7 definitely be no, because if I saw
8 something like that, it didn't in any way
9 inform any of my opinions. My opinions
10 are really about the data. Not about --
11 about some subject matter conduct by any
12 of the parties.

13 Q. Aside from any documents
14 cited in your expert reports, did you
15 review any documents produced by
16 defendants regarding their own suspicious
17 order monitoring programs?

18 A. I don't think I did
19 personally, but my staff did see some
20 suspicious order monitoring reports. I
21 know that we received some. They didn't
22 inform any of my opinions.

23 Q. Okay. What did they
24 receive?

1 A. I don't know.

2 Q. Do you know regarding which
3 defendants?

4 A. No. I'm sorry. I might
5 have answered a little too quickly to the
6 prior question.

7 I think what my recollection
8 is, that I was told, that we received
9 kind of a hodge-podge of e-mails or
10 memos, that the reporting wasn't
11 particularly systematic or organized, to
12 the best of my recollection.

13 As I said, it didn't
14 inform -- wasn't used in any way in my
15 analysis and didn't inform in any way my
16 opinions. But that's my recollection of
17 what we received.

18 Q. And are you referring to
19 actual suspicious order reports or are
20 you referring to suspicious order
21 monitoring programming?

22 I just want to make sure we
23 are talking about the same thing.

24 A. I've told you everything I

1 know already on the subject. I can't
2 qualify it any more than that.

3 Q. Okay. Did you consider any
4 documents relating to investigations that
5 defendants may have done into potentially
6 suspicious orders?

7 A. No.

8 Q. Did you consider any
9 documents regarding audits of the
10 suspicious order monitoring programs by
11 DEA, Board of Pharmacy, or otherwise?

12 A. No.

13 Q. Did you review any
14 communications between defendants, any of
15 them, and the DEA?

16 A. Only again at one step
17 removed. The ARCOS data, 10 or 12 of the
18 34 fields we received are transmitted by
19 the defendants to the DEA. And so the
20 source material that we received
21 ultimately came in large part from the
22 defendants, but by communication, if you
23 mean letters or e-mails or analysis, no,
24 I did not.

1 Q. Since issuing your original
2 report or either of your two supplements,
3 besides defendants having supplemented
4 their transactional data, have you
5 reviewed anything else regarding the
6 opioids litigation, anything else
7 produced in discovery?

8 A. I don't think so.

9 Q. The materials reflected in
10 your materials reviewed section of your
11 reports, are those materials that you
12 asked for or are they materials that were
13 provided to you without you asking for
14 them?

15 A. I'm sorry. I don't think I
16 can answer the question the way that
17 you've asked it. I can rephrase it for
18 you if you like or you could --

19 Q. Sure. As long as we do it
20 relatively quickly.

21 A. Well, it's neither, right.
22 You asked me was it provided to me
23 without me asking for it or did I ask for
24 it. So most of those items are items

1 that we would source ourselves during our
2 work, researching the data that we
3 receive. So just take for an example, D,
4 E, F, G, H, those are all examples, as we
5 were -- and B and C, these are all items
6 that as we were developing the data last
7 summer, we sourced without asking for it
8 from the plaintiffs' counsel or the
9 plaintiffs' counsel providing it to us
10 without us asking for it, which were the
11 two possibilities your question covered.

12 Q. Thank you. So was there
13 anything that you asked for in forming
14 your opinions that plaintiffs' counsel
15 did not give you?

16 A. No, not that I can think of.

17 Q. Let's take a quick look on
18 Page 4 of your initial report. Paragraph
19 13, under heading "Summary of Opinions."

20 Do you see where I am?

21 A. Yes.

22 Q. Paragraph 13 says, "Based
23 upon my comparison of the ARCOS data
24 produced by the DEA and the public ARCOS

1 retail drug summary reports, I conclude
2 that, after correcting a relatively small
3 number of records, the ARCOS data
4 produced by the DEA is reliable."

5 Did I read that correctly?

6 A. Yes.

7 Q. And then if we go ahead to
8 Paragraph 17, still under "Summary of
9 Opinions," the first sentence there says,
10 "I conclude from my review of the ARCOS
11 data, the retail drug summary reports,
12 and transaction data produced in
13 discovery by the defendants, that the
14 ARCOS data is reliable."

15 Did I read that accurately?

16 A. Yes.

17 Q. And then that paragraph
18 continues, correct?

19 A. Yes.

20 Q. So is it fair to say that
21 you are of the opinion that the ARCOS
22 data is generally reliable?

23 THE WITNESS: Bless you.

24 Yes, with the qualification

1 that I make throughout the report,
2 that is my opinion.

3 BY MS. McENROE:

4 Q. An in -- at, like, a
5 30,000-foot level, the sort of first half
6 of your report is largely taking
7 transactional data that defendants have
8 produced in this litigation, comparing it
9 to the ARCOS data to help you form that
10 opinion that ARCOS data is reliable?

11 I'm not trying to make this
12 one a trick question. If you want to
13 describe it a different way, go ahead.

14 A. I would -- I would just add
15 to that a comparison with the retail drug
16 summary reports, which is what we looked
17 at on Paragraph 13. But if you add
18 comparing the ARCOS data that we received
19 from the DEA, the retail drug summary
20 reports, and the defendant transaction
21 data, comparing those three views of what
22 should be the same underlying data, we
23 think that at least those three views are
24 consistent, is how I would describe it.

1 Q. And to maybe put a finer
2 point on it, that is the analysis
3 conducted in Section 5, I believe, of
4 your report; is that correct? Five and
5 six?

6 A. Five and six. Yes.

7 Q. Great. And so the purposes
8 of Sections 5 and 6 are both to reach
9 that conclusion that we were just
10 discussing; is that correct?

11 A. Well, there's a little bit
12 more to it than that. But as you said,
13 at a high level, I think that's fair.

14 Q. Okay. So you got
15 defendants' transactional data, and you
16 got different data from each of the
17 defendants' production. Is that fair to
18 say?

19 A. Yes.

20 Q. And how did you get access
21 to defendants' productions? Did you have
22 access to the production database of the
23 documents produced directly from
24 defendants or was it provided to you

1 separately?

2 A. Well, there's some
3 technology there that I may be challenged
4 to describe. So the easiest way for me
5 to think about the data we received is
6 the ARCOS data was received on DVDs or
7 hard drives.

8 Q. Yep.

9 A. And then some additional
10 production was received through some
11 internet-based technology shared between
12 the plaintiffs' counsel and my office. I
13 wasn't directly involved in the
14 transmission, so there's some technical
15 details there that I'm not familiar with.

16 Q. Did your office have access
17 to the defendants' overall production, so
18 more than what was produced for
19 transactional data?

20 A. Yes.

21 Q. Did your office go looking
22 at things more than the transactional
23 data?

24 A. Yes.

1 Q. What did they go looking at?

2 A. Well, we -- we talked a
3 little bit earlier about the suspicious
4 order reports, what I'm calling generally
5 the suspicious order reports. That would
6 be one example.

7 I can't think of other
8 examples as I'm sitting here. But I'm
9 sure there is other material besides the
10 individual defendant transaction data and
11 the suspicious order reports, what I'm
12 referring to generally and somewhat
13 vaguely, because it's just my
14 understanding of how to describe some set
15 of e-mails or reports on suspicious order
16 monitoring.

17 Chargeback data is another
18 example. We don't use the chargeback
19 data very much. But that's another
20 example of data that was produced by the
21 defendants, as I understand it.

22 What additional categories
23 of documents or data my staff might have
24 looked at, I don't -- I don't know. I

1 have described what I can recall.

2 Q. And did you look at any of
3 the suspicious order reports documents,
4 as you've described them?

5 A. I don't recall. If I did,
6 it was just on a screen. It wasn't
7 something that was printed off or a
8 binder or, you know, a folder. It was
9 seeing what looked like an e-mail or a
10 memo or something like that, looking over
11 the shoulder of one of my staff and being
12 told that's what the suspicious order
13 files look like.

14 Q. Does that inform any of your
15 opinions in your report?

16 A. No.

17 Q. Take a look at Page 29 of
18 your first report, Paragraph 29
19 coincidentally. I'm sorry. Footnote 29
20 is what I meant.

21 A. Yes.

22 Q. So the footnote says, "The
23 13 defendants are ANDA,
24 AmerisourceBergen, Cardinal Health, CVS,

1 Discount Drug Mart, HBC, Henry Schein, HD
2 Smith, McKesson, Prescription Supply,
3 Rite Aid, Walgreens and Walmart.

4 "I do not discuss the data
5 produced by Rite Aid or Henry Schein
6 because the produced data was
7 insufficient to compare with the ARCOS
8 data.

9 "Rite Aid did not produce
10 the buyers' DEA numbers, and the data
11 produced by Rite Aid does not identify
12 which counties are included in the data.

13 "Henry Schein did not
14 include the buyers DEA number or NDCs."

15 And then you go on to say,
16 "Appendix 7 lists the data fields
17 provided by each defendant. I have
18 standardized the names of the field to
19 simplify the presentation."

20 Did I read that correctly?

21 A. Yes.

22 Q. What did you do to seek out,
23 if anything, the data produced by Rite
24 Aid and Henry Schein?

1 A. We notified the plaintiffs
2 of the deficiencies in the data just as
3 we did for some of the other defendants.

4 Q. Okay. And plaintiffs did
5 not come back to you specifically with
6 respect to Rite Aid with clarification
7 regarding the location of the Rite Aid
8 data in the production database?

9 A. Not that I recall.

10 Q. Footnote 30 says, "For
11 example, Rite Aid only produced
12 transactions for 2007 and only for
13 hydrocodone, 9193."

14 Then it keeps going.

15 A. Yes.

16 Q. In a number of your charts
17 you put N/A for certain Rite Aid entries,
18 because presumably you didn't have that
19 data. Do you recall that?

20 A. No.

21 Q. So for example, see if I
22 can -- take a look at Page 63. You'll
23 see Rite Aid is third from the bottom
24 above the total?

1 A. Yes.

2 Q. And you have N/A for
3 oxycodone, morphine, hydrocodone,
4 oxymorphone.

5 Do you see that?

6 A. Yes.

7 Q. For Rite Aid?

8 Did you understand or have
9 any understanding that Rite Aid did not
10 distribute any of those specific drugs?

11 A. I don't know one way or
12 the -- the other, but if that's the case,
13 then N/A would cover it.

14 Q. Would it properly be zero as
15 opposed to N/A, if you knew that?

16 A. I don't know. I'd have to
17 think about that.

18 Q. Let's take a look at your
19 resumé. Hold on one second.

20 (Document marked for
21 identification as Exhibit
22 McCann-4.)

23 BY MS. McENROE:

24 Q. I'm going to mark this as

1 Exhibit 4, which I believe is Appendix 1
2 to your March 25th report.

3 A. Thank you.

4 Q. Great. Thank you.

5 And I'll represent to you
6 that this is what you had included as
7 Appendix 1. Does this look familiar?

8 A. Yes.

9 Q. Is there anything you'd like
10 to correct in Exhibit 4, or is it all
11 right if we consider this to be your
12 qualifications and experiences?

13 A. There -- there, of course,
14 would be a couple of additional entries.
15 The two -- if we were preparing this
16 report -- this resumé today rather than
17 on March 25th, it would be the two
18 supplemental reports, and then I gave a
19 deposition last week or the week before
20 in the case that's third down on -- on
21 Page 97, the SEC V RPM.

22 Other than that, I -- I'm
23 not aware of any changes that I would
24 make to it.

1 Q. So you have a Bachelor's
2 degree, a Master's degree, and a Ph.D.;
3 is that correct?

4 A. Correct.

5 Q. And your Ph.D. is in
6 economics, correct?

7 A. Correct.

8 Q. Okay. You are not a medical
9 doctor, correct?

10 A. Correct.

11 Q. You did not attend medical
12 school?

13 A. Correct.

14 Q. You are not a physician's
15 assistant?

16 A. Correct.

17 Q. You are not licensed to
18 write prescriptions?

19 A. Correct.

20 Q. You are not a pharmacist?

21 A. Correct.

22 Q. Fair to say you're not an
23 expert in healthcare or the healthcare
24 industry?

1 A. Yes.

2 Q. Fair to say that you do not
3 have professional experience with
4 suspicious order monitoring?

5 A. Yes.

6 Q. You have not been involved
7 in designing a suspicious order
8 monitoring program, correct?

9 A. Correct.

10 Q. You have not reviewed
11 guidance from the DEA regarding
12 suspicious order monitoring, correct?

13 A. Correct.

14 Q. You are not experienced with
15 supply chain; is that correct?

16 So what I mean by that is
17 the moving of products along a supply
18 chain, like in this case,
19 pharmaceuticals, are you an expert in
20 that?

21 A. Yeah, I was going to say,
22 I'm -- I'm familiar with the concept.
23 And a little bit familiar with operations
24 research. But I would not call myself an

1 expert in supply chain management.

2 Q. Would you consider yourself
3 an expert in suspicious order monitoring?

4 A. No.

5 Q. Would you consider yourself
6 an expert in issues from -- relating to
7 the Drug Enforcement Agency?

8 MR. MOUGEY: Objection.

9 THE WITNESS: That's a
10 little too broad a question.
11 There may be some aspects that I
12 would be an expert in, for
13 instance, the -- the aspects that
14 I actually address in my expert
15 report, which is the assessment of
16 the data.

17 But if you mean something
18 more specific to the DEA as
19 opposed to the data that the DEA
20 produced to me, then I would
21 say -- I would agree with you,
22 what -- whatever the implication
23 was of your question.

24 BY MS. McENROE:

1 Q. Sure. And so I can say it
2 another way. You've never worked at the
3 DEA, correct?

4 A. Correct.

5 Q. You've never worked at the
6 FDA?

7 A. Correct.

8 Q. You've never worked at the
9 CDC?

10 A. Correct.

11 Q. Do you have any
12 healthcare-related experience, aside from
13 being potentially a consumer of
14 healthcare, that's not reflected in your
15 Appendix 1 to your expert report?

16 A. No.

17 Q. Is it fair to say that the
18 vast majority of your professional
19 experience relates to securities-related
20 issues?

21 Or I can say that a
22 different way if you'd prefer.

23 And I think I've seen you
24 having written this a number of times.

1 That the majority of your consulting work
2 since you left the SEC has primarily
3 involved the analysis of investments.

4 Is that a true statement?

5 A. Yes.

6 Q. This case does not involve
7 the analysis of investments, correct?

8 A. Correct.

9 Q. Do you know what the word
10 "anhydrous" means?

11 A. Someone told me and I forget
12 right now. It's not something that --
13 that I recall.

14 Q. In your report, you have
15 certain statements with regards to
16 certain drug weights or the makeup of
17 certain pharmaceuticals. Do you have
18 personal knowledge on which you can be
19 making those statements?

20 A. I'm sorry, could you give me
21 an example?

22 Q. Sure. So let's take a
23 look -- let's do Appendix 2.

24 (Document marked for

1 identification as Exhibit

2 McCann-5.)

3 BY MS. McENROE:

4 Q. I'm going to hand you what

5 I'm marking as Exhibit 5, which is

6 Appendix 2 to your March 25th report.

7 A. Thank you.

8 Q. Sure. And let's take a look
9 together at Paragraph 191. So this is
10 just an example.

11 And I'm going to be
12 starting, a couple lines down, there's a
13 sentence towards the end of the line that
14 starts "I reviewed the ingredient base
15 weights."

16 Do you see that?

17 A. Yes.

18 Q. Okay. And it says, "I
19 reviewed the ingredient base weights in
20 the NDC dictionary for all NDCs with
21 dosage units in the ARCOS data and
22 flagged ingredient base weights as
23 potentially incorrect, if the weight of
24 the drug per dosage form, e.g., capsule,

1 tablet, patch, was significantly
2 different than the other drug products
3 with the same base drug and dosage
4 strength."

5 Do you see that?

6 A. I do.

7 Q. What methodology did you use
8 to make those determinations?

9 A. Well, I compared NDCs with
10 the same active ingredient, the same drug
11 code, and noted that for some NDCs, the
12 ingredient base weights were orders of
13 magnitude different than other NDCs for
14 the same drug code.

15 So to give you a simple
16 example, if I may. There might be an NDC
17 for a package of 10 pills and an NDC code
18 for a package of 30 identical pills. And
19 the -- the base weights for those two
20 packages should be in that same
21 proportion, three to one. And there are
22 just a handful of examples, maybe a dozen
23 or two dozen examples, where -- where
24 there appears to be an error.

1 We actually see some of
2 those errors being corrected over time in
3 the NDC dictionary. Because if you
4 access the NDC dictionary today it will
5 be slightly different than the NDC
6 dictionary that you accessed a year ago.

7 And so we give you an
8 example in the next -- I give you an
9 example in the next paragraph of exactly
10 what I'm describing.

11 Q. Did you do anything other
12 than consult with the dictionary to check
13 that that methodology was appropriate or
14 correct?

15 A. Well, yes, you can see in
16 Footnote 62 I'm referencing an appendix
17 to the ARCOS handbook that is sort of an
18 independent check on the calculation that
19 I did. So we've -- we first, when we got
20 the ARCOS data, and checked some of the
21 calculated base weights in the ARCOS data
22 against the ingredient base weight in the
23 NDC dictionary, we found some patterns
24 like the pattern I just described to you

1 across those two NDC codes.

2 And from that and from some
3 additional analysis, we see a, depending
4 on the drug code, a factor or a ratio
5 between the stated strength and the
6 ingredient base weight.

7 And then later we -- we
8 verified those with the ratios described
9 in Appendix 3 of the ARCOS handbook.

10 Q. Can you turn to Paragraph
11 204 in that Exhibit 5.

12 A. Yes.

13 Q. In the section headed
14 "Transactions with Obvious Errors in
15 Quantity."

16 A. Yes.

17 Q. It says, "I also exclude
18 transactions with obvious errors in
19 quantity. For example, I exclude a
20 single sale transaction of
21 hydrocodone/APAP tablets from a
22 distributor to a practitioner in the
23 Northern Mariana Island that has
24 calculated base rate of 34 metric tons."

1 Did you exclude any other
2 entries aside from that one obvious
3 error?

4 A. At some points in our
5 report, certainly yes, as I described in
6 the early part of the report when I'm
7 summarizing the data as we received it
8 from ARCOS. I forget the tables exactly,
9 but we could look at them if you like.
10 As we go from Table 3 to 4, or something
11 like that, I condensed some of the ARCOS
12 data, for example, excluding reverse
13 distributors from an intermediate
14 discussion of the data because there are
15 examples where -- where there's a
16 manufacturer shipment to a reverse
17 distributor of -- I'll make the number
18 up -- but 1,000 units. And the same NDC
19 code with the same quantity but a
20 different unit code is shipped from the
21 reverse distributor to an analytical lab.

22 The reverse distributor and
23 the manufacturer in my example are both
24 reporting that first transaction, but the

1 reverse distributor is putting in the
2 wrong unit code and reporting a base
3 weight or implying a base weight --

4 Q. Sir, I'm sorry to interrupt
5 you. But we're a little short on time,
6 so I just want to make sure.

7 It looks, in this Appendix
8 2, that you've differentiated
9 transactions involving reverse
10 distributors, analytical labs, importers,
11 exporters, or researchers from
12 transactions with obvious errors in
13 quantities. In this section, you walk
14 through methodologically -- sorry, lost
15 the word -- of how you got through this
16 data.

17 And I'm asking specifically
18 with respect to transactions with obvious
19 errors in quantity, whether you know if
20 you've excluded any others on that
21 specific basis.

22 A. I'm sorry. I wasn't at a
23 period. If I could just have a few more
24 words to complete my sentence.

1 Q. No, I'm sorry. I'm sorry.
2 Special Master Cohen has ruled, at least
3 at the deposition of Dr. Eagleman, that
4 we're entitled to cut you off. And I can
5 say for the record, the record can
6 reflect, that your answer was not
7 complete.

8 MR. MOUGEY: Special Master
9 Cohen -- that you can cut the
10 witness off in the middle of a --

11 MS. McENROE: Correct, and
12 we can just consider it --

13 MR. MOUGEY: -- on a
14 response to a question.

15 MS. McENROE: Yes. Yes. We
16 are very limited by time.

17 MR. MOUGEY: If you can show
18 me the --

19 MS. McENROE: I certainly
20 can get you --

21 MR. MOUGEY: That would be
22 great. So we can cut each other
23 off during the course of the
24 depositions --

1 MS. McENROE: We can.

2 MR. MOUGEY: And we can
3 give -- the witness can't give an
4 opportunity to --

5 MS. McENROE: At my peril.

6 MR. MOUGEY: -- to answer
7 the question?

8 MS. McENROE: At my peril,
9 that his answer is not complete.
10 I'm just trying to make sure -- he
11 wasn't answering the correct
12 question because he was answering
13 a different question. So I'm
14 trying to make sure that we
15 preserve our time.

16 BY MS. McENROE:

17 Q. So with respect specifically
18 to Subsection F here, transactions with
19 obvious errors in quantity. Taking into
20 account that you have your other sections
21 talking about other corrections you've
22 made to the data, can you recall any
23 other specific obvious errors with
24 quantity that you corrected?

1 A. I believe there are others.
2 But they are de minimus. I don't recall
3 another example as I sit here, besides
4 the one that I give you there.

5 Q. Okay. Let's turn to
6 Paragraph 121 on Page 50 of your
7 March 25th report. So that will be in
8 the bound document there.

9 So on Page 50, that last
10 line in Paragraph 21 (sic) there's a
11 sentence that starts with
12 "buprenorphine."

13 Do you see that?

14 A. Yes.

15 Q. Okay. "Buprenorphine and
16 fentanyl have a large MME relative to
17 their dosage units because both are
18 prescribed as skin patches, which
19 dispense the drug for up to one week."

20 Do you see that?

21 A. Yes.

22 Q. And you have no citation
23 there, right?

24 A. Correct.

1 Q. Do you know if there are
2 other formulations of buprenorphine or
3 fentanyl?

4 A. Yes.

5 Q. And how do you know that?

6 A. From the NDC dictionary.

7 Q. Do you know about drug or
8 pharmaceutical formulations other than
9 from the NDC dictionary or the ARCOS
10 registrant handbook? Do you have other
11 professional or educational experience on
12 which to base the statements that you put
13 in your report along those lines?

14 A. No.

15 Q. What is -- do you know what
16 it means for a drug to be Schedule I,
17 Schedule II, III, IV, V?

18 A. Generally, but not part of
19 my -- as part of my expert experience or
20 opinion.

21 Q. Are you aware that the only
22 drugs at issue in this litigation are a
23 particular set of opioid pain medications
24 that are or ever have been Schedule II?

1 A. Yes.

2 Q. From my understanding, you
3 include codeine in your analysis; is that
4 correct?

5 A. Yes.

6 Q. Including certain
7 formulations with -- involving codeine
8 that are and have always been a Schedule
9 III; is that correct?

10 A. I'm not sure. That, I
11 think, goes beyond my expertise. What
12 I've done is I've analyzed the data that
13 the DEA produced and that the defendants
14 produced.

15 Q. Right. But you're not using
16 all of the data that the DEA and the
17 defendants produced in your analysis,
18 right? You're picking certain of the
19 data for your analysis? So, for example,
20 you exclude certain treatment-related
21 medications from some of your analysis,
22 right?

23 A. I think that's a different
24 issue. But yeah, some of the tables do

1 not include two treatment drugs.

2 Q. Did you intend to include
3 Schedule III drugs that are not within
4 the scope of this litigation in your
5 analysis?

6 A. I intended to analyze all of
7 the data that the DEA produced and that
8 the individual defendants produced
9 regardless of what schedule they were on.
10 It's just reporting of the data for the
11 benefit of the court.

12 Q. So if the data was produced
13 by the DEA but does not concern a drug
14 that's at issue in this litigation, it's
15 possible that could be accounted for in
16 your analysis?

17 A. I would say it a little bit
18 differently. If it's a drug that was
19 produced by the DEA and by the individual
20 defendants, it's in our analysis.

21 MS. McENROE: Can we go off
22 the record for a second.

23 THE VIDEOGRAPHER: Off the
24 record at 12:13 p.m.

1 (Whereupon, a discussion was
2 held off the record.)

3 - - -

4 (Lunch break.)

5 - - -

6 A F T E R N O O N S E S S I O N

7 - - -

8 THE VIDEOGRAPHER: We are
9 back on the record at 1:03 p.m.

10 - - -

11 EXAMINATION (Cont'd.)

12 - - -

13 BY MS. McENROE:

14 Q. Hi, Dr. McCann, thank you
15 for joining us again.

16 I'd like to direct your
17 attention, in your March 25th report,
18 which I think is Exhibit 3 if I'm
19 recounting correctly.

20 A. Yes.

21 Q. Great. Could you please
22 turn to Page 6 which is Paragraph 21.

23 A. Yes.

24 Q. And it says in Section 9, if

1 I'm getting my Roman numerals correct; is
2 that right?

3 A. Yes.

4 Q. Okay. "In Section 9, I
5 describe a nonexhaustive set of
6 algorithms that can be systematically
7 applied to the ARCOS data and present a
8 check on the various estimates presented.
9 In Section 10, I provide certain
10 estimates regarding the total aggregate
11 shipments of opioids into Ohio from 1997
12 to 2018. In Section 11, I describe
13 certain charts and tables that are
14 attached to this report. In Section 12,
15 I give my conclusions."

16 Did I read that correctly?

17 A. Yes.

18 Q. Okay. And you say in that
19 first sentence that you're describing a
20 nonexhaustive set of algorithms that can
21 be systematically applied to the ARCOS
22 data.

23 Are you planning to apply
24 any other algorithms not articulated in

1 your March 25th report or either of your
2 supplements to the ARCOS data in this
3 litigation?

4 A. Not as I sit here.

5 Q. And when you say that, you
6 say because you might do some later, but
7 you haven't been asked to yet?

8 A. Right. It's not something I
9 intend to do or that I am contemplating
10 as I sit here. But there might be
11 additional facts developed or there might
12 be some instruction from the court or for
13 some other reason, another alternative
14 may come to mind that I would develop and
15 implement. But I -- I don't have
16 anything in mind, as I sit here.

17 Q. So even though you say that
18 in Section 9 you are describing a
19 nonexhaustive set of algorithms, you're
20 not meaning that to say that you have not
21 listed all the algorithms that are
22 forming your opinions in this report in
23 this report?

24 A. Correct.

1 Q. And you say that the
2 algorithms can be systematically applied.
3 Do you see where it says that?

4 A. Yes.

5 Q. And in saying can be
6 systematically applied, are you saying
7 that they are appropriate or should be
8 applied or -- are you taking that
9 opinion?

10 A. No, I think that would get
11 into some subject matter expertise that
12 I'm not claiming to have. I was asked to
13 implement these algorithms, which at some
14 broad level, has some assumptions. And
15 then make an additional assumption or
16 two, apply it to the data and report out
17 the results. And that's what I've done.

18 Q. So speaking in a broad
19 level, which I think makes sense to start
20 and then we'll get a little bit more
21 specific.

22 And I don't mean this to be
23 pejorative in any way. But is it fair to
24 say that you are serving in a role like a

1 computer, a sort of old school computer,
2 that -- that you are taking in the data,
3 processing it and putting out output in
4 your opinions?

5 A. Yes. Exactly.

6 Q. Okay. And you're not saying
7 that the sort of black box that data is
8 going into is the right or the only
9 algorithm to be used on that data. You
10 are just the one who is actually doing
11 the calculations; is that correct?

12 A. Well, close. It's not a
13 black box at all. A black box is
14 something where something -- data goes in
15 and results come out and you can't tell
16 what's happening. In fact, this is not a
17 black box. It's the opposite of that.

18 I'm describing for you in
19 detail, I think, exactly what's being
20 done to the data. I don't take a
21 position on whether -- which or if any of
22 these algorithms and the associated
23 assumptions are appropriate, I think was
24 the word you used earlier?

1 Q. Yep.

2 A. I'm just saying that you
3 take the -- the data that we've prepped,
4 and apply these formulas to it, you get
5 particular results.

6 Q. And is that also true not
7 only about whether those algorithms, the
8 assumptions, are appropriate, but also
9 true that you are not making any opinion
10 as to whether they are legally required?

11 A. Right. I think all of these
12 issues are being handled by other
13 experts. I -- as you said a minute ago.
14 And I didn't take it as a pejorative.
15 I'm just serving as a calculator.

16 Q. And in this Paragraph 21 you
17 use the -- the phrase "algorithms" to
18 discuss what's being applied in
19 Section 9. But you also use the word
20 "approaches" later I believe.

21 Are you saying the same
22 thing?

23 So are -- in -- calling it
24 algorithms here in Paragraph 21, are you

1 describing what you later in your report
2 call an approach, Approach 1, Approach 2,
3 Approach 3?

4 A. Yes.

5 Q. Let's take a look at
6 Section 9. So in particular I'll point
7 you to Paragraph 130, which is -- starts
8 on Page 56.

9 Are you there?

10 A. Yes.

11 Q. Great. And the section
12 heading is "Transaction Analysis."

13 Do you see that?

14 A. Yes.

15 Q. And this is what we were
16 just referring to when we were talking
17 about the algorithms?

18 A. Yes.

19 Q. And Paragraph 130 starts, "I
20 implemented various approaches to
21 identify transactions meeting specified
22 criteria using the non-public ARCOS data
23 from 2006 to 2014, supplemented with
24 defendant transaction data where the

1 ARCOS data is obviously missing
2 transactions that are included in the
3 transactions produced by defendants in
4 discovery, and to the extent I have
5 defendant transaction data for the
6 periods before 2006 and after 2014, I
7 calculated the results separately for
8 each of the 12 controlled substance drug
9 codes."

10 Do you see that?

11 A. Yes.

12 Q. And then you have a footnote
13 there that "you do not analyze
14 transactions in two treatment drugs,
15 buprenorphine and methadone."

16 Do you see that?

17 A. Yes.

18 Q. How did you pick that list
19 of 12 controlled drug codes?

20 A. Well, by taking the 14 drug
21 codes we received from the DEA and
22 excluding the two, what I understand to
23 be treatment drugs identified in
24 Footnote 54.

1 Q. Okay. And you didn't -- you
2 didn't apply any other criteria?

3 A. Not that I can think of.

4 Q. Okay. In that Paragraph 130
5 that I just read out, you say at the
6 beginning that you implemented various
7 approaches. And is that talking about
8 the approaches that are discussed later
9 in that section, Approaches 1, 2, 3, 4
10 and 5?

11 A. Yes.

12 Q. You are not talking about
13 anything else than that?

14 A. Correct.

15 Q. And then you have five
16 approaches in this report; is that
17 correct?

18 A. Yes.

19 Q. And the first one is the
20 maximum monthly trailing six-month
21 threshold, correct?

22 A. Correct.

23 Q. And the second is the twice
24 trailing 12-month average pharmacy dosage

1 units, correct?

2 A. Yes.

3 Q. And we can do it slower,
4 sorry, you're flipping through.

5 MR. MOUGEY: Which page are
6 you referencing?

7 MS. McENROE: I'm just going
8 through a list of them, but --

9 MR. MOUGEY: Right.

10 MS. McENROE: -- that's
11 fine.

12 BY MS. McENROE:

13 Q. The third one starts on
14 Page 64. So the third one is the three
15 times trailing 12-month average pharmacy
16 dosage units; is that correct?

17 A. Yes.

18 Q. The fourth one starts on
19 Page 68, is the maximum 8,000 dosage
20 units monthly; is that correct?

21 A. Yes.

22 Q. And the fifth one, starts on
23 Page 72, is maximum daily dosage units.

24 Do you see that?

1 A. I do.

2 Q. So if I refer to your five
3 approaches, will you understand that I'm
4 referring to those five approaches as
5 I've just read them out?

6 A. Yes.

7 Q. Did you apply any other
8 approaches aside from those five in
9 reaching your conclusions?

10 A. Not with respect to the
11 conclusions I reached in Section 9 at
12 least.

13 Q. Okay. From where did you
14 get the five approaches that you apply in
15 Section 9?

16 A. From discussions with
17 counsel.

18 Q. Who? Is it the same list of
19 people that we discussed earlier today?

20 A. Yes. There may be some
21 additional lawyers whose names didn't
22 come to mind when I was giving you the
23 names of people I interacted with
24 earlier.

1 Q. Anyone come to mind?

2 A. It would be -- it would be
3 something like that list and perhaps
4 more.

5 Q. Anyone in particular that
6 you think you left out earlier that comes
7 to mind?

8 A. No.

9 Q. Did you get any input on
10 these five approaches from any of your
11 discussions with current or former DEA
12 agents?

13 A. No.

14 Q. Did you take any other step
15 to verify with the DEA that any or all of
16 these approaches are appropriate in this
17 setting?

18 A. I'm sorry. I don't know
19 what you mean by any other, but I didn't
20 do anything other than serve as the
21 computer, you referred to me as earlier.
22 I took these approaches and implemented
23 them, applied them to the data. That's
24 what I did.

1 Q. Okay. So just so that I can
2 make sure that I have it all straight.
3 So you got the five approaches from
4 plaintiffs' counsel, and you applied them
5 to the data, and that's it, with respect
6 to Section 9?

7 A. Correct.

8 Q. So it's fair to say that any
9 one of these approaches could be or could
10 not be appropriate for use in this
11 particular setting; you're just not
12 taking an opinion on that one way or the
13 other?

14 A. Right. I think other
15 witnesses are going to deal with that
16 issue.

17 Q. And just to make sure I'm
18 totally clear, you're not opining
19 anywhere that any of these approaches is
20 or is not required by law in any way?

21 A. Correct.

22 Q. I think you mentioned
23 earlier that there are certain
24 assumptions that are built into your

1 approaches. Do you remember mentioning
2 that?

3 A. Yes.

4 Q. Let's take a look at Page
5 100 -- sorry, Paragraph 131 of your
6 report.

7 This is under the Heading A,
8 "Maximum Monthly Trailing Six-Month
9 Thresholds."

10 Do you see that?

11 A. Yes.

12 Q. Okay. And in this
13 paragraph, it starts, "Under the first
14 approach, I identify transactions that
15 cause the number of dosage units shipped
16 by a distributor to a pharmacy in a
17 calendar month to exceed the highest
18 number of dosage units shipped by the
19 distributor to the pharmacy in any one of
20 the six preceding calendar months."

21 Did I read that correctly?

22 A. Yes.

23 Q. And then you go on and you
24 have an example, right? It says, "For

1 example, if the number of dosage units
2 containing hydrocodone shipped from a
3 distributor to a pharmacy in February,
4 March, April, May, June, and July, were
5 5,000, 10,000, 7,000, 8,000, 9,000, and
6 9,500 respectively, a requested
7 transaction in August would be flagged,
8 if it would cause the number of dosage
9 units containing hydrocodone, the
10 distributorship to the pharmacy, to
11 exceed 10,000."

12 Did I read that correctly?

13 A. Yes.

14 Q. And then it continues, "Any
15 reported transactions containing
16 hydrocodone on that date and all reported
17 transactions containing hydrocodone from
18 that distributor to that pharmacy
19 thereafter are flagged."

20 Did I read that correctly?

21 A. Yes.

22 Q. And is that all part of an
23 approach that came from plaintiffs'
24 counsel? So that's what they asked you

1 to do in this approach?

2 A. I'm pausing just for a
3 second to make sure when you say, is that
4 all, prior to the instruction that I got
5 from counsel, I think the answer is yes.

6 Q. Paragraph 132 says, "In this
7 approach and the others implemented
8 below" -- just pausing there for a
9 second. The others implemented below are
10 the rest of the five approaches in this
11 Section 9; is that correct?

12 A. Yes.

13 Q. So it says, "In this
14 approach, and the others implemented
15 below, I have been asked by counsel to
16 assume that the distributor did not
17 effectively investigate the flagged
18 transactions, and so every subsequent
19 transaction of that drug code is also
20 flagged because the distributor had an
21 unfulfilled obligation to detect and
22 investigate the first flagged
23 transaction."

24 Is that assumption made in

1 Paragraph 132 also from direction of
2 counsel?

3 A. Yeah, so I might shorten
4 that sentence up a great deal, because
5 there's some of that sentence that's not
6 necessary to describe our implementation.

7 Q. Explain to me what you mean
8 by that.

9 A. Well, as it's written, as I
10 wrote it --

11 Q. Yeah.

12 A. -- I said counsel asked me
13 to assume that the distributor did not
14 effectively investigate the flagged
15 transactions. And so every subsequent
16 transaction of that drug code is also
17 flagged because the distributor had an
18 unfulfilled obligation to detect and
19 investigate the first flagged
20 transaction.

21 Operationally, you could
22 condense that to just say, I was asked to
23 flag every subsequent transaction after
24 the first transaction is flagged. It

1 doesn't need the rest of the context to
2 describe the calculation that I did.

3 It's there because I'm sort
4 of describing my understanding, but it's
5 not necessary to describe the
6 calculations. Just if you hit a flag,
7 everything after that is flagged. And
8 some other witness will deal with whether
9 there was effective due diligence and
10 whether in the absence of that there was
11 an ongoing duty that should trigger a
12 flag on all the subsequent transactions.

13 Q. Is it your assertion after
14 the because -- so where it says -- you
15 know, it says the first part that you
16 were just reading, and then it says,
17 "Because the distributor had an
18 unfulfilled obligation to detect and
19 investigate the first flagged
20 transactions."

21 Is that coming from you or
22 is that coming from plaintiffs' counsel,
23 the reasoning of the because?

24 A. It's coming from the

1 plaintiffs' counsel. I don't -- you
2 know, I was asked to assume everything
3 that's in that sentence, including that
4 last clause that you've read.

5 Q. And just so I make sure that
6 I understand, that assumption -- that is,
7 flagging every subsequent transaction for
8 that specific drug after you have a
9 flagged transaction -- you apply across
10 all five of the methodologies or
11 approaches used in Section 9; is that
12 correct?

13 A. Correct.

14 Q. For every distributor, for
15 each of the drugs that you use or
16 manufacture as appropriate for the second
17 supplemental report?

18 A. Correct.

19 Q. So that I understand and
20 make sure we're totally clear. You have
21 a methodology that you explain here in
22 Paragraph 131 regarding the maximum
23 monthly trailing six-month threshold; is
24 that correct? We were just talking about

1 that.

2 A. Yes.

3 Q. Okay. And then once you
4 have a triggering entry, the rest of them
5 are flagged. Do you apply that maximum
6 monthly trailing six-month threshold to
7 those remaining subsequent transactions
8 in any way?

9 A. Yes.

10 Q. And how is that? Because if
11 they seem that you have a triggering and
12 the rest of them are all just flagged,
13 are you doing the analysis of the rest of
14 them, of which ones should be flagged and
15 which ones should not?

16 A. No. The end of your prior
17 question was "in any way." And what I
18 meant by saying yes to that is that those
19 subsequent transactions are only flagged
20 because of the application of that rule,
21 having flagged one transaction. Anything
22 after that is flagged. So they are
23 affected, the identification of those
24 transactions are affected by the

1 application of the rule.

2 Q. I see. Okay. So I see. So
3 I just want to make sure that the
4 transactions that come later could be
5 more than the trailing six months before
6 it or they could be lower than the
7 trailing six months before it, but
8 they're flagged because they are coming
9 after one triggering entry?

10 A. Correct.

11 Q. And did you do the analysis,
12 if you didn't use that assumption about
13 the subsequent flagging after you have
14 one triggering entry about how many of
15 the entries would be flagged or not
16 flagged if you didn't use that
17 assumption?

18 MR. MOUGEY: Objection.

19 THE WITNESS: I'm sorry,
20 could you repeat that again?

21 BY MS. McENROE:

22 Q. Sure.

23 A. The static is --

24 BY MS. McENROE:

1 Q. It's a little distracting.

2 MS. McENROE: Anybody on the
3 line, if you can make sure to mute
4 yourself, that would be greatly
5 helpful.

6 Thank you.

7 BY MS. McENROE:

8 Q. So my question is this, did
9 you run an analysis applying any of your
10 approaches to the transactions that are
11 flagged because of the assumption based
12 on them being subsequent transactions to
13 one that had been flagged, to see what
14 proportion of those would be flagged or
15 not flagged in their own right regardless
16 of the assumption about the first
17 triggering transaction?

18 MR. MOUGEY: Objection.

19 THE WITNESS: Not for
20 purposes of this report. And --
21 and in some prior analysis of the
22 data, getting to understand the
23 data, we did some variations like
24 what you described. I don't know

1 if it's exactly what you
2 described. But we -- we did other
3 analysis.

4 BY MS. McENROE:

5 Q. Without that assumption
6 about the first triggering transaction
7 flagging the remainders?

8 A. Correct.

9 Q. Across the different -- the
10 five different approaches?

11 A. I don't recall whether that
12 is correct or not.

13 Q. So you don't know one way or
14 the other, but you may have?

15 A. Correct.

16 Q. And do you have a sense of
17 the difference that this one assumption
18 makes about flagging the subsequent
19 transactions in terms of the number of
20 transactions or the proportion of
21 transactions that are flagged?

22 MR. MOUGEY: Objection.

23 THE WITNESS: I have some
24 general intuition. I don't

1 have -- I don't -- I don't have a
2 quantified answer for you. But I
3 have a general intuition.

4 BY MS. McENROE:

5 Q. What's your general
6 intuition?

7 A. Well, because for most of
8 these defendants, you see a substantial
9 increase over time, especially leading up
10 to 2010 or 2011. If you reset that
11 trailing six-month maximum to be the
12 maximum of the most recent six months,
13 then you end up with fewer transactions
14 being flagged.

15 Q. Okay. So it would be a
16 downward trend if you took away the
17 assumption about the subsequent
18 transactions being flagged?

19 A. Correct.

20 Q. We've been using the
21 terminology of a transaction being
22 flagged. And that's language you used in
23 your report as well, correct?

24 A. Correct.

1 Q. What do you mean by a
2 flagged transaction?

3 A. Well, for my purposes it's
4 just a -- an example we were looking at a
5 minute ago, a fairly simple, if-then
6 step. I think of everything I -- I've
7 done here in terms of what you can do in
8 Excel. And so imagine that you've got
9 numbers in two columns and you've got a
10 rule that says if Column A exceeds
11 Column B, put a one in that cell. And I
12 would think of that one as a flag. And
13 the absence of that one, signifying that
14 A does not exceed B, being an unflagged
15 transaction.

16 And then it's only a slight
17 further modification to say in that third
18 column, it's a one if A exceeds B or if
19 the column above -- the value above is
20 one. And then you would just fill in
21 ones in every cell after the first time A
22 exceeds B.

23 And all I mean by flagging
24 is that it's got that checkmark or one

1 for that transaction and everything that
2 follows it.

3 Q. Are you of the opinion that
4 a flagged transaction means that that
5 transaction represents a suspicious
6 order?

7 A. That's way beyond my report,
8 I think.

9 Q. Are you --

10 A. I'm sorry, I apologize. I
11 don't have an opinion one way or the
12 other. If -- if you inferred from my
13 answer that I think it means that it is
14 not a suspicious order, I didn't mean
15 that. I just mean I don't have an
16 opinion one way or the other.

17 Q. Understood. But just to
18 make sure we are speaking the same
19 language. It's fair to say that you are
20 not taking the opinion that a flagged
21 transaction is necessarily a suspicious
22 order?

23 A. Correct.

24 Q. And it's also fair to say

1 that you are not saying that a flagged
2 transaction is necessarily illegal or
3 representative of illegal conduct?

4 A. Correct.

5 Q. It's also fair to say that a
6 flagged transaction in your opinion does
7 not necessarily mean there's been a
8 failure of due diligence?

9 A. Correct.

10 Q. I want to take a look real
11 quick specifically at this first
12 approach, the maximum monthly trailing
13 six-month threshold.

14 And I want to -- your --
15 your -- strike that.

16 Your example here is very
17 helpful for understanding it, so I
18 appreciate that.

19 But I want to get an
20 understanding for, in practical terms,
21 various of the defendants for different
22 reasons may have gaps in their data. So
23 for example, they may have been serving a
24 pharmacy for a period of time, the

1 pharmacy switched to a different
2 distributor, and then went back to that
3 distributor.

4 Are you familiar with those
5 kinds of changes or variations in the
6 data, just speaking generally?

7 A. Yes.

8 Q. Okay. How were gaps in the
9 data or entries without anything included
10 handled in figuring out the maximum
11 monthly trailing six-month threshold?

12 A. I'm sorry, I don't think I'm
13 understanding that question.

14 Q. Sure. So I have a
15 hypothetical for you. We can try and
16 walk through it to see if that helps to
17 clarify.

18 A. Okay.

19 Q. We have a pharmacy
20 purchasing from a distributor in January
21 through June, let's say of 2007. I'm
22 just picking a year. But does not
23 purchase from that distributor from July
24 through December of 2007. Okay? So

1 there's been a gap there.

2 If the pharmacy purchases
3 from the distributor again in
4 January 2008, how do you set that
5 threshold when you pick up again with the
6 distribution to that pharmacy?

7 A. Well, that's a good
8 question. That's a hypothetical I hadn't
9 thought of. I'd have to look at the data
10 and see the -- and see how -- how
11 significant that is.

12 A slight variant on your
13 hypothetical would be if -- if the
14 pharmacy had bought from the distributor,
15 let's say in four of the previous six
16 months, then it would be just as I
17 described it there in the example. If
18 you imagine in -- in March and May the
19 quantity is zero, so that the quantities
20 are 5,000, 7,000, 9,000, and 9,500, then
21 it still would be the case that if a
22 transaction in August put you past, in
23 this hypothetical, 9,500, not 10,000, you
24 would flag the transaction.

1 So blanks in the six-month
2 window don't affect the calculation. The
3 conditional statement is still, if the
4 cumulative transactions that month exceed
5 the highest of the preceding six calendar
6 months, you flag the transaction.

7 We don't ever flag a
8 transaction in the first -- at least
9 under this methodology, in the first six
10 months of the purchases from a
11 distributor. But if a pharmacy is buying
12 from a distributor and then there's a gap
13 of greater than six months, six months or
14 greater, I'd have to think through and
15 maybe just check and see how that is
16 handled. It -- whether we handle it as
17 restarting the clock, but I just don't
18 recall as I sit here.

19 Q. Do you know if you guys
20 input, you and your staff I should say,
21 input any threshold or baseline, if there
22 was no data included, so you would pick a
23 number and put it in there?

24 A. No, not for that purpose.

1 There is another slight -- you'll see
2 in -- in the code, besides what's
3 described here, an assumption that's a
4 little bit conservative. You have to
5 exceed the prior six months maximum and
6 also exceed a thousand pills in my
7 recollection, a thousand dosage units.

8 So if you were -- if your
9 transactions were 100, 100, 100, 100,
10 200, we don't flag that transaction. So
11 there are sort of de minimus quantities
12 that are not being flagged. But I don't
13 recall anything else.

14 Q. And with the application of
15 these approaches to the data, am I
16 correct that you were limiting the
17 analysis to shipments from distributors
18 to pharmacies and excluding other
19 shipments, for example, to hospitals and
20 clinics or other practitioners?

21 A. In Section 9, that's
22 correct.

23 Q. Across all five of the
24 approaches?

1 A. Yeah. So at least that was
2 our -- our intention was to only include
3 retail and chain pharmacies, to exclude
4 mail order pharmacies and what is
5 referred to, I think, as closed door
6 pharmacies.

7 Q. What do you mean by closed
8 door pharmacies?

9 A. Well, they would be things
10 like long-term care facilities perhaps,
11 or -- I don't know if you're from the
12 area, but near where I live there's a
13 Sunrise assisted living facility that I
14 drive past every day. And I think that's
15 my next home. And I think that there are
16 other locations of Sunrise around here.

17 And in my mind, anyway, when
18 I refer to closed door pharmacy, I'm
19 thinking about a facility like that that
20 may have received drugs and sent them out
21 to patients in a residence and affiliated
22 facilities, but they're not taking
23 walk-in customers, if you will.

24 Q. Sure. Off the street.

1 A. Right.

2 Q. Okay. And so I also just
3 want to get an understanding. A number
4 of your approaches use months as a unit.

5 A. Correct.

6 Q. Did you use calendar months?

7 A. Yes.

8 Q. Okay. So you didn't use
9 30 days as a more standardized month?

10 A. I don't know if more
11 standardized, but we're using calendar
12 months.

13 Q. Calendar months. Okay. So
14 some could be 28 days or 31 days. It
15 could vary depending on whatever that
16 month is?

17 A. Correct.

18 Q. And that's true for each of
19 the approaches in Section 9 that uses a
20 month unit; is that fair?

21 A. Yes.

22 Q. We talked a little bit
23 earlier. You are not a pharmacist,
24 correct?

1 A. Correct.

2 Q. Have you ever worked in a
3 pharmacy?

4 A. No.

5 Q. Aside from being a customer
6 at a pharmacy, do you have any
7 professional experience with pharmacies?

8 A. No.

9 Q. Fair to say that you are not
10 an expert in pharmacy practice?

11 A. Yes.

12 Q. And you're not an expert in
13 pharmacy business?

14 A. Correct.

15 Q. Fair to say you're not an
16 expert of wholesale pharmaceutical
17 distribution?

18 A. Yes.

19 Q. Fair to say you're not an
20 expert in pharmacy manufacture?

21 A. Yes.

22 Q. Have you -- strike that.

23 In your report, I don't see
24 anything making reference to the business

1 of pharmacy, so how pharmacies conduct
2 their business, for example how
3 frequently they order drugs. Did you do
4 any research or take in that -- take
5 those issues into account in any way in
6 your opinions?

7 MR. MOUGEY: Objection.

8 THE WITNESS: Yes, at least
9 in some sense.

10 BY MS. MCENROE:

11 Q. And I can make it a little
12 bit of a crisper question. So have you
13 undertaken any study to understand how
14 pharmacies go about ordering drugs from a
15 distributor?

16 A. No.

17 Q. Do you have any
18 understanding of how frequently
19 pharmacies order drugs from a
20 distributor?

21 A. Yes.

22 Q. And do you have any
23 understanding that some pharmacies could
24 be on a set schedule, like a weekly

1 schedule?

2 A. Yes.

3 Q. And so using your calendar
4 month approach, would it be fair to say
5 that you could, for example, have some
6 months where a pharmacy might have four
7 orders and some months where a pharmacy
8 might have five orders in that specific
9 month?

10 A. Yes.

11 Q. Did you take that into
12 account in any way when you used your
13 monthly based approaches in Section 9?

14 A. Yes.

15 Q. How did you do that?

16 A. Well, if -- if there are
17 five orders in a month in the first six
18 months or in the trailing six months, the
19 sum of those five shipments are in that
20 threshold, the month's total. And that
21 may or may not be the highest of the six
22 months totals.

23 And if the month that you're
24 looking at, in comparison to the prior

1 six months has either four or five weekly
2 orders in your hypothetical, then they're
3 all included.

4 Q. Right. So I understand that
5 they get swept into the analysis because
6 that's just the way that the calendar
7 works, and they're part of those months.
8 But did you correct it out in any way to
9 more than standardize the fact that some
10 months may look bigger than other months
11 in your monthly based analyses in Section
12 9 because of the different variation of
13 how many weeks could be in a month?

14 A. No, but I reject your color
15 in that question. I don't see anything
16 needs to be corrected. So when you say
17 did you correct something out, I'm
18 acknowledging that in -- in 12 months,
19 covering 52 weeks, some of those months
20 have four weeks in them, or you know,
21 some of them have five weeks, some of
22 them have five Thursdays, some have four
23 Thursday. I don't think that's something
24 to be connected. It's a fact of the

1 data.

2 And my read of the -- of the
3 data is as I described it, it's calendar
4 months, there's nothing to be connected.

5 MS. McENROE: Okay. For the
6 record. I strike -- I move to
7 strike everything after "no."

8 Thank you.

9 BY MS. McENROE:

10 Q. And so do you account in any
11 way in your analyses for legitimate
12 pharmacy growth over time?

13 A. Well, I'm not a subject
14 matter expert or a lawyer. When you say
15 legitimate growth, I don't think that's a
16 question that I can answer for you.

17 Q. Sure. So let me restate the
18 question a little bit differently. So
19 you're not a pharmacy business expert,
20 but you own a business, right?

21 A. Correct.

22 Q. And you've operated in the
23 business world. You've been an expert in
24 certain securities-related issues in the

1 business world; is that correct?

2 A. Yes.

3 Q. And you understand that over
4 time, businesses can grow, not saying
5 that they have to, that would be nice,
6 but they can grow, right?

7 A. Yes.

8 Q. And there can be perfectly
9 legitimate reasons for that. For
10 example, your own consultancy has gotten
11 bigger over time, I presume?

12 A. Yes.

13 Q. Do you agree that there
14 could be perfectly legitimate reasons why
15 a pharmacy business might grow over time?

16 MR. MOUGEY: Objection.

17 BY MS. MCENROE:

18 Q. You may answer.

19 A. Yes.

20 Q. Have you done any analysis
21 of the DEA's quotas for opioids over
22 time?

23 A. No.

24 Q. Do you have any

1 understanding of what that means?

2 A. No.

3 Q. In any of your approaches
4 discussed in Section 9 of your report,
5 did you take into account or analyze in
6 any way how natural disasters or other
7 changes may have impacted your output?
8 So for example, if there was a hurricane
9 in a certain area or something of the
10 like?

11 MR. MOUGEY: Objection.

12 THE WITNESS: Not that I
13 could think of as I sit here.

14 BY MS. McENROE:

15 Q. Okay. Do you have an
16 understanding that there could be a
17 legitimate reason why a pharmacy may have
18 a spike in its needs?

19 A. Yes.

20 Q. Let's turn to Paragraph 136.
21 So we're going to move into Approach
22 Number 2. And this is -- do you see
23 where I am, on Page 60?

24 A. I do. Thank you.

1 Q. It says, "Twice trailing
2 12-month average pharmacy dosage units."

3 Do you see that?

4 A. Yes.

5 Q. Great. And so Paragraph 136
6 says, "I identified transactions that
7 cause the number of dosage units shipped
8 by a distributor to a pharmacy in a
9 calendar month to exceed twice the
10 trailing 12-month average dosage units to
11 retail and chain pharmacies served by the
12 distributor. I have been asked by
13 counsel to assume that the distributor
14 did not effectively investigate the
15 flagged transactions, and so every
16 subsequent transaction of that drug code
17 is also flagged because the distributor
18 had an unfulfilled obligation to detect
19 and investigate the first flagged
20 transaction."

21 Did I read that correctly?

22 A. Yes.

23 Q. So the first sentence of
24 Paragraph 136 is explaining what I'm

1 calling Approach Number 2 or B, it's the
2 second one, in your Section 9, correct?

3 A. Yes.

4 Q. And then the second sentence
5 in Paragraph 136, is that articulating
6 the same assumption we discussed just a
7 minute ago regarding the flagging of
8 every transaction after you have a
9 triggering one?

10 A. Yes.

11 Q. Okay. And just to be clear,
12 that assumption has been included in each
13 of your five approaches for Section 9,
14 correct?

15 A. Yes.

16 Q. So I want to get an
17 understanding for the use of the word
18 "average." And I know you probably know
19 a lot more about averages than I do at
20 least. So we're going to try to keep it
21 simple if we can.

22 What do you mean, or how did
23 you arrive at the average used in this
24 approach?

1 A. So again I think of things
2 in terms of what you could do in Excel or
3 I visualize it as an Excel spreadsheet if
4 I may?

5 Q. Sure. Yeah, please.

6 A. So let's suppose that you've
7 got a spreadsheet that has shipments
8 measured in dosage units of each drug
9 code from a distributor to all of the
10 pharmacies that they ship that drug code
11 to at any time in the last 12 months.

12 Q. Over what geography?

13 A. The country. So I'll make
14 it a little bit more concrete.

15 Cardinal Health in January
16 of 2008, I look at what Cardinal Health
17 shipped to every pharmacy it ever shipped
18 to in 2007. And so the -- the columns
19 would be, in my example, the pharmacies
20 that it shipped to. And let's say that
21 there's 3,000 pharmacies across the
22 country. And down the -- the rows I have
23 the 12 months in 2007. And what I'm
24 filling in in that spreadsheet is the

1 number of dosage units that Cardinal
2 Health shipped to each of those
3 pharmacies in each of those months in
4 2007 of a particular drug code.

5 And then you could, in
6 Excel, just say, take the average of all
7 of that, where there's a positive number.
8 So if there's a zero or a negative, you
9 ignore it.

10 Take the average of all of
11 the dosage units in any month to any of
12 the pharmacies. And whatever that
13 average is, is your threshold to multiply
14 by two or by three to determine whether
15 the shipments in January of 2008 get
16 flagged.

17 Q. So that's for the way you
18 use the word "average" for your second
19 and third approaches in Section 9; is
20 that correct?

21 A. Correct.

22 Q. Okay. And so to make sure
23 I'm understanding, using your
24 hypothetical example of the Excel

1 spreadsheet, you would sum up all of the
2 rows and then divide them by the number
3 of entries that have something that's not
4 zero or negative?

5 A. No. You are summing across
6 all of the observations at one time. So
7 in my example, let's say there's 100
8 pharmacies and 12 months. If there was
9 something shipped to each of the
10 pharmacies, you'd have 1200 observations.
11 100 pharmacies, 12 months.

12 So you'd add up those 1200
13 numbers and you'd divide by 1200 to get
14 the average.

15 Q. Thank you. And so you said
16 you skipped the zeros and you skipped the
17 negative.

18 What do you mean by negative
19 entries in that setting? What kind of
20 observations are you talking about?

21 A. Well, I don't know if there
22 were any, but it could be that there was
23 a return that would show up as a negative
24 dosage unit.

1 Q. So you did not -- if there
2 were returns, you didn't back those out
3 of the totals you were using?

4 A. In -- in some places that is
5 done. But I would not be -- I have to
6 confirm this, but I don't believe that in
7 my prior example if 1,199 entries were
8 positive and one of the entries was
9 negative, I included the negative. But
10 I'm just not 100 percent sure as I sit
11 here.

12 Q. So you think you did take
13 that into account?

14 A. Well, as I said, in -- in
15 some parts of the analysis, yes. It's --
16 it's very de minimus, but I just -- I'm
17 not 100 percent certain as I sit here in
18 the example that I just gave you, if one
19 of those 1200 observations was a negative
20 number, how we dealt with it.

21 Q. So is it fair to say that in
22 these five approaches in Section 9, you
23 don't know how returns were handled?

24 A. My -- my recollection, I'd

1 have to confirm it, but my recollection
2 is that returns would be included in
3 the -- in the monthly totals that would
4 be in the 1200 cells in my example. And
5 the cumulative orders in January of 2008
6 would also include a return if there was
7 a return prior to the transaction that
8 flagged, got flagged and then caused all
9 subsequent transactions to be flagged.
10 That's a very de minimus issue, but I
11 just don't -- to be precise, I'm not --
12 I'm not 100 percent certain.

13 Q. So taking a couple steps
14 back. In the application of these
15 various approaches, there is computer
16 code; is that fair to say?

17 A. Yes.

18 Q. And we defendants asked for
19 plaintiffs' counsel to provide us the
20 computer code, and -- and we got a large
21 amount of information regarding the codes
22 that you and your team used. Are you
23 aware of that?

24 A. Yes.

1 Q. Do you write computer code?

2 A. Not in 35 years.

3 Q. Okay. Did you write any of
4 the computer code used in connection with
5 your opinions in this litigation?

6 A. I don't believe so.

7 Q. Did you review any of the
8 computer code used in this litigation?

9 A. Yes.

10 Q. And did you confirm that the
11 computer code as applied in this
12 litigation, reflects what you intended it
13 to reflect based on what you expressed in
14 your report?

15 A. Yes.

16 Q. And do you have an
17 understanding of how the computer code
18 calculates the averages used for the
19 second and third approaches in Section 9?

20 A. Yes.

21 Q. Can you please explain that
22 to me?

23 A. Well, it's just as I
24 described it.

1 Q. So, I am by no means an
2 expert on computer code. But I -- people
3 who are better at these things than I am
4 took a look at it. And what they told me
5 is there are three different ways that
6 you calculated an average, and then used
7 those three to reach the average you used
8 in your report. Does that sound familiar
9 to you?

10 A. I'm sorry, it doesn't.

11 Q. Okay. And that with doing
12 that, there were different files that had
13 source code and then different codes that
14 used that -- I'm sorry, there were
15 different datasets and code that used
16 those datasets. Are you familiar with
17 that kind of concept?

18 A. Yeah. That's a different
19 issue, but yeah, certainly.

20 Q. Yeah. And in doing those
21 averages, they did use some of those
22 datasets and certain code. Does that
23 make sense to you?

24 A. Yes.

1 Q. Okay. In applying the
2 averages to the different defendants in
3 this case, is it your intention that each
4 defendant have their average calculated
5 in substantially the same way?

6 A. Yes.

7 Q. If that were not the case,
8 would that be a mistake?

9 A. Not necessarily.

10 Q. What do you mean by that?

11 A. Well, I forget which, but
12 one of the defendants had -- had a little
13 or no data outside of Ohio, and so the
14 average would be calculated -- you could
15 think of it calculated on a state basis
16 instead of nationally.

17 There may be other reasons
18 why. There might be some variation on
19 the general description that I gave you.
20 I'd have to look and see what your
21 consultants think they saw in the code
22 that they would do differently.

23 I have -- I've attempted to
24 describe what the code did and I've

1 attempted to implement the code to
2 reflect what I intended.

3 It's -- it's possible that
4 someone would say that -- that an average
5 should be calculated differently or the
6 sequencing of steps in the code should be
7 done differently.

8 And I just have to evaluate
9 such an assertion. I -- I do not believe
10 any such evaluation would result in -- in
11 any material change in any calculation
12 that we did.

13 Q. Was it your intention that
14 different defendants would be treated
15 differently for the purposes of averages
16 depending on if the spelling of that
17 defendant's name matched in the source
18 data versus the code in which the data
19 was used?

20 A. Well, certainly not. We
21 tried to correct a lot of misspelling or
22 variations in spelling in the data. But
23 it's possible that we didn't catch all of
24 it.

1 Q. And it's possible that those
2 would then be mistakes?

3 A. I wouldn't think of them as
4 mistakes, no. It would be issues with
5 the data that the data we were provided
6 don't have standardized spelling or same
7 entity, named differently. And it would
8 be a mistake in the data, not in our
9 analysis.

10 Q. But your team wrote the
11 code, right?

12 A. Correct.

13 Q. So if the code names of the
14 defendants doesn't match the source
15 datasets such that the datasets are not
16 run in the code and you just get a whole
17 bunch of zeros, that would not be a
18 mistake in the dataset; that would be a
19 mistake in the code, correct?

20 A. I don't know. I'd have to
21 see the example and look at the data and
22 see whether -- whether the code should be
23 modified to pick up more transactions.

24 Q. Was it your intention that

1 certain defendants who have national data
2 available had their averages calculated
3 only for Summit and Cuyahoga Counties?

4 A. Yes. That would certainly
5 be true in some situations.

6 Q. But a couple minutes ago you
7 told me your intention was to calculate
8 national averages for the purposes of
9 your Approaches 2 and 3 in Section 9,
10 correct?

11 A. That's correct.

12 Q. So if what I'm telling you
13 is that some of the defendants who had
14 national data available actually had
15 their averages calculated based just on
16 Cuyahoga and Summit Counties, would that
17 be a mistake for those defendants?

18 A. No, I don't think so. I can
19 explain if you'd like.

20 Q. Please do.

21 A. But maybe I'm not
22 understanding your --

23 Q. Well, please explain, and
24 then we can see if I'm --

1 A. Sure.

2 Q. -- trying to ask something
3 different.

4 A. So in Approach 2 and 3
5 you've got trailing 12-month averages.
6 And for some of the defendants, we get
7 individual defendant transaction data
8 prior to the ARCOS period, prior to 2006.
9 I'll use Cardinal as an example, because
10 I think we have data from Cardinal Health
11 going back to 1997. But we only have
12 that data for Cuyahoga and Summit, or
13 maybe for Ohio more broadly. For some of
14 the defendants we had more or less data
15 prior to 2006.

16 So for the -- for whatever
17 data we have from a defendant prior to
18 2006 we would calculate the average
19 across the pharmacies that they gave us
20 data for, up to January of 2007.

21 When you get to January of
22 2007, we then have 12 months of ARCOS
23 data. And so you would start using ARCOS
24 data nationally for the calculation. So

1 for some of those defendants, we're
2 using -- you could interpret that as
3 using state or county averages when
4 national data is available.

5 But if you're -- if I'm
6 articulating the calculation correctly, I
7 think you would agree that we should be
8 using the county or state data that the
9 defendants produced in the pre-ARCOS
10 period for calculating the averages up
11 through January of 2007.

12 So there's a data issue
13 there. If, in addition to that data
14 issue I identified for you, there's some
15 issue with some spelling or some other
16 issue that you think means that we've
17 applied a different methodology for
18 different defendants with the same data
19 available, I'm happy to look at that.

20 But there are situations where you would
21 use more narrow data even when national
22 data is available. And throughout 2006
23 would be a good example of that, and
24 after 2014 as well.

1 Q. You mentioned a little bit
2 earlier that your code needs to be run in
3 a particular sequence. Do you remember
4 that?

5 A. No. That's not the way I
6 said it.

7 Q. Okay. But to understand
8 what you did, you ran things in a certain
9 sequence when you were doing your
10 analysis, correct?

11 A. Correct.

12 Q. And is there a way that we
13 can tell from your report in what
14 sequence you took those different steps
15 to apply your approaches?

16 A. Yes.

17 Q. How?

18 A. Well, it's -- gets pretty
19 deep in the weeds. But the programming
20 has, as you were alluding to a few
21 minutes ago, some intermediate data files
22 that are created and then used by
23 subsequent modules of the code, or by
24 code written in other applications that

1 read in those intermediate files.

2 Even within the same file of
3 code there are sections of that code that
4 we call -- that we describe as being
5 commented out, and by commented out, what
6 I mean is you might write a lengthy piece
7 of code which is just a text file, it
8 looks like a text file without the nice
9 formatting that you would have in words.
10 So think of it like a Wordpad file.

11 And when you write 20 or 30
12 pages of that code, each time you run it,
13 you don't necessarily want every line of
14 that code executed. And so you comment
15 it out, it depends on the language, but
16 with a percentage sign or with a couple
17 of backslashes.

18 And so depending on what you
19 want to execute of that lengthy code, you
20 are commenting out stuff or undoing the
21 commenting. You can get to all of the
22 tables in my report by using the code
23 that we provided to you. Sometimes you
24 might have to comment something out,

1 or -- or take some of the commenting out.

2 There might be a couple of
3 instances where you might have to write
4 another single line reading in a file
5 that we forgot to identify. I mean, it's
6 identified, but there may be -- out of
7 tens of thousands of lines of code, there
8 might be a line or two or five that an
9 experienced programmer would say, yes,
10 Craig really intended for you to read in
11 a file that's identified up at the top
12 again, and it's missing. But with very
13 little effort, the code that we provided
14 to you recreates all of this analysis.

15 Q. Did you provide the
16 intermediate data files that you made
17 reference to?

18 A. I believe all of the ones
19 that are saved, so along the way when you
20 write code, there are intermediate files,
21 temp files, if you will, that are created
22 by the code and then discarded. And so
23 they're not saved anywhere. But I think
24 any -- any file that's saved was provided

1 to you. Again, that would be my
2 intention.

3 Q. So how could we recreate
4 your process without what you're calling
5 those temp files?

6 A. Because they're described in
7 the code.

8 Q. And your position is that
9 you've provided sufficient information
10 for us to know the sequencing of the code
11 that you ran?

12 A. Yes.

13 Q. And you don't have any other
14 documentation on the sequencing of the
15 code that you ran that we haven't been
16 provided with?

17 A. That's correct.

18 Q. If you were to start from
19 scratch and apply your own code afresh,
20 would you be able to do it in precisely
21 the same sequence that you did it the
22 first time based on what you provided to
23 us?

24 A. I believe so. That was my

1 intention.

2 Q. Is it your intention that
3 our experts would be able to apply the
4 code that you provided to us in exactly
5 the same sequence based on what you've
6 provided to us?

7 A. If they're experienced
8 programmers, yes. As I said, there might
9 be a couple of instances where, when you
10 run the code -- I know you don't want me
11 to take much time. But maybe if I could
12 take 30 seconds, I could explain it.

13 Q. Please.

14 A. So again, think of the code
15 as 30 pages of text file. And as we're
16 running the code to create a table or a
17 figure or do some analysis or create an
18 intermediate file, you're choosing which
19 part of that 30 pages to run and which
20 part not to run.

21 And so you can't run
22 necessarily all 30 pages. You are
23 executing some part of the code. And
24 what we provided to you was all of that

1 30 pages.

2 And someone who's an expert
3 programmer will look at that and say,
4 okay, here are blocks of the text that
5 were executed the last time this code was
6 executed. But if I want to -- if I want
7 to execute some other text, I need to
8 uncomment some lines, or if as doing --
9 in doing that I want to comment out some
10 other lines, or as I said, there might be
11 a data file that's referenced in
12 subsequent code, but the code above it
13 doesn't read in the data file and a
14 programmer would say, somehow Craig
15 inadvertently deleted or forgot to
16 include a single line here that says read
17 in a file that is mentioned in the next
18 paragraph of the code.

19 So I do believe that I
20 provided you all of the code that will do
21 everything that you've asked for.

22 Q. All right. Let's take a
23 look at Paragraph 140 on Page 64. And
24 this is the three times trailing 12-month

1 average pharmacy dosage units.

2 Do you see that?

3 A. Yes.

4 Q. And Paragraph 140 says, "I
5 identified transactions that caused the
6 number of dosage units shipped by a
7 distributor to a pharmacy in a calendar
8 month to exceed three times the trailing
9 12-month average dosage units to retail
10 and chain pharmacies served by the
11 distributor. I have been asked by
12 counsel to assume that the distributor
13 did not effectively investigate the
14 flagged transactions so every subsequent
15 transaction of that drug code is also
16 flagged because the distributor had an
17 unfulfilled obligation to detect and
18 investigate the first flagged
19 transaction."

20 Do you see that?

21 A. Yes.

22 Q. And is that substantially
23 the same as what we discussed about your
24 second approach, the two times trailing

1 12-month average with respect to your
2 assumption on the subsequent transactions
3 being flagged?

4 A. Yes.

5 Q. And so it's fair to say that
6 the language following "because at the
7 end, the distributor had an unfulfilled
8 obligation to detect and investigate the
9 first flagged transaction," those are not
10 your words, that's not your concept?

11 A. Correct. That sentence
12 could be collapsed to about eight words.

13 Q. Okay. Talking about first
14 this specific approach, the three times
15 trailing 12-month average. There is no
16 citation for where it comes from; is that
17 right?

18 A. Except in the first
19 paragraph that introduces Section 9 where
20 I say that I was asked to implement these
21 algorithms by plaintiffs' counsel. So
22 the cite would be plaintiffs' counsel.

23 Q. Okay. So the cite would be
24 plaintiffs' counsel. It's not some other

1 industry document or guidance like we
2 talked about earlier with respect to any
3 of the approaches, correct?

4 A. Correct.

5 Q. Your fourth approach starts
6 at Paragraph 144. Do you see that on
7 Page 68?

8 A. Yes.

9 Q. It says maximum 8,000 dosage
10 units monthly; is that correct?

11 A. Yes.

12 Q. And it says, on
13 Paragraph 144, "I identify transactions
14 that cause the number of dosage units
15 shipped by a distributor to a pharmacy in
16 a calendar month to exceed 8,000 dosage
17 units. I have been asked by counsel to
18 assume that the distributor did not
19 effectively investigate the flagged
20 transactions and so every subsequent
21 transaction of that drug code is also
22 flagged because the distributor had an
23 unfulfilled obligation to detect and
24 investigate the first flagged

1 transaction."

2 Did I read that correctly?

3 A. Yes.

4 Q. Just like we talked about
5 with your third approach, I don't see a
6 cite for the source of this fourth
7 approach. Is it also plaintiffs'
8 counsel?

9 A. Yes.

10 Q. And is it also the same as
11 to the assumption that the concept
12 towards the end following the "because
13 the distributor had an unfulfilled
14 obligation to detect and investigate the
15 first flagged transaction," that's not
16 your words, that's counsel's words?

17 A. Correct.

18 I'm sorry, I would say it a
19 little bit differently.

20 As I said a couple of times
21 now when we talked about that sentence
22 which we see five times in the report, it
23 could be condensed to just say I've been
24 asked by counsel to flag all subsequent

1 transactions after a transaction has been
2 flagged. And it could be full stop with
3 that.

4 Q. Okay.

5 A. It doesn't require the rest
6 of what's in that sentence.

7 Q. And the rest of that
8 sentence is not your opinion?

9 A. Correct.

10 Q. And you don't have a basis
11 other than counsel for including that in
12 your report?

13 A. It's not an opinion I have.

14 Q. Okay. Taking a quick look
15 at Page 72, Paragraph 148. You'll see
16 maximum daily dosage units.

17 Do you see that?

18 A. Yes.

19 Q. And this is your fifth
20 approach, right?

21 A. Correct.

22 Q. And Paragraph 148 says, "I
23 identified transactions that caused the
24 number of dosage units shipped by a

1 distributor to a pharmacy in a day to
2 exceed a number of dosage units that
3 varies by drug type and within some drug
4 types by formulation."

5 Then you have a citation.
6 We'll get back to that in a second.

7 And then it says, "I have
8 been asked by counsel to assume that the
9 distributor did not effectively
10 investigate the flagged transactions and
11 so every subsequent transaction of that
12 drug code is also flagged because the
13 distributor had an unfulfilled obligation
14 to detect and investigate the first
15 flagged transaction."

16 Did I read that accurately?

17 A. Yes.

18 Q. And this is describing the
19 fifth approach that we talked about a
20 little bit earlier?

21 A. Yes.

22 Q. And in that last clause
23 following the "because," this is the same
24 language we were just discussing, that

1 the distributor had an unfulfilled
2 obligation to detect and investigate the
3 first flagged transaction, like we talked
4 about, is not an opinion of yours, that
5 was provided to you by plaintiffs'
6 counsel, correct?

7 A. Yes.

8 Q. Why did you cite to the
9 document you have in Paragraph Number 55?

10 A. Well, because there's a
11 daily threshold that varies across the
12 drugs and it's a little bit more
13 complicated than the first four methods,
14 how you identify a flag. And so rather
15 than itemize in the footnote what each of
16 the daily thresholds are by drug, we cite
17 to the document where we used values for
18 the daily thresholds, where we find --
19 I'm sorry, where we find values for the
20 daily thresholds.

21 Q. How did you come to cite
22 that document in Footnote 55?

23 A. The document was provided to
24 us by counsel and we were asked to

1 implement an approach that uses the daily
2 thresholds in that document.

3 Q. Are you taking any position
4 or making any opinion on the
5 appropriateness or that lack thereof, of
6 applying those thresholds from that
7 document cited in Footnote 55?

8 A. No.

9 Q. Substantively, do you have
10 an understanding of what that document
11 is?

12 A. I have a general
13 understanding, not an expert opinion.
14 But a general understanding of the
15 document.

16 Q. And how did you come to a
17 general understanding of that document?

18 A. Well, I reviewed it. It's a
19 two-page document. I think it's a
20 Cardinal Health document. And it gives,
21 on those two pages -- I've heard it
22 referred to as the cage vault rule. I'm
23 not sure exactly the significance of that
24 term.

1 But my understanding is
2 that -- that it -- it limited shipments
3 or flagged shipments of the various drugs
4 that are listed there to a certain amount
5 per day.

6 The significance is not --
7 is -- for me is just a list of drugs and
8 a list of numbers, daily limits. I -- I
9 don't -- I didn't investigate the origin
10 of that document or how it might have
11 been used in realtime.

12 Q. Sure. And was that document
13 provided to you?

14 You mentioned it was a
15 two-page document?

16 A. That's my recollection.

17 Q. Was it provided to you as
18 part of a thicker document or just as a
19 two-page document?

20 A. I don't know.

21 Q. And you said sometimes it's
22 referred -- referred to as the cage vault
23 rule. By whom?

24 A. I've heard my staff refer to

1 it as cage vault. I don't know what the
2 origin of that term is.

3 Q. Okay.

4 A. When you are at a good
5 stopping point for a comfort break --

6 Q. Let's take a break right
7 now. Perfect. Let's do it.

8 THE VIDEOGRAPHER: Off the
9 record at 2:14 p.m.

10 (Short break.)

11 THE VIDEOGRAPHER: We are
12 back on the record at 2:43 p.m.

13 BY MS. McENROE:

14 Q. Dr. McCann, could you please
15 turn to Page 76 of your report. There's
16 a section headed "Additional
17 Information."

18 Do you see that?

19 A. No. I'm sorry. "Additional
20 Identification."

21 Q. Additional -- did I -- yes,
22 sorry, I'll start over.

23 So we're on Page 76, right
24 above Paragraph 152 is a header that says

1 "Additional Identification," correct?

2 A. Yes.

3 Q. It says, "I have been asked
4 by counsel to assume that chain
5 distributors may have had knowledge of --
6 or information available to inform them
7 of -- opioid shipments from all
8 distributors to the chain distributors'
9 affiliated pharmacies."

10 Do you see that?

11 A. Yes.

12 Q. Did I read that correctly?

13 A. Yes.

14 Q. And it goes on to say, "I
15 have rerun the five identification
16 routines described above assuming that
17 the chain distributors could have flagged
18 transactions based on this expanded
19 information set and the report" -- "and
20 report the results for the chain
21 distributors in Tables 34 through Table
22 43 below."

23 (Telephonic interruption.)

24 BY MS. McENROE:

1 Q. "Additional charts and
2 tables reflecting the result of applying
3 methodologies below to each chain
4 distributor are in Appendix 11."

5 With my couple hiccups, did
6 I read that correctly?

7 A. Yes.

8 Q. Okay. And so if I'm
9 understanding correctly, you took the
10 five approaches from earlier in Section 9
11 of your report and rerun -- reran them
12 here, but looking at the chain
13 distributors from the perspective of what
14 they were receiving as customers? Is
15 that a fair way to characterize it?

16 A. Yes. I didn't think of it
17 that way, but that's -- that's right I
18 think.

19 Q. And the assumptions and
20 understandings that we discussed earlier
21 today with respect to the five
22 methodologies or approaches, those
23 assumptions would continue to hold true
24 as applied here in the additional

1 identification section, correct?

2 A. Correct.

3 Q. Do you have any
4 understanding of the legal claims brought
5 against what you're referring to as the
6 chain distributors?

7 A. No.

8 Q. Have you read the complaint
9 in this case?

10 A. I did.

11 Q. Do you have -- do you know
12 that the chain distributors are not being
13 sued in their dispensing capacity, so for
14 the pharmaceuticals that they were buying
15 and dispensing out to patients? Do you
16 have an understanding one way or the
17 other?

18 A. That's my general
19 understanding, that there -- yes, what
20 you just said is consistent with my
21 general understanding.

22 Q. So you think the chain
23 distributors are being sued because
24 they're pharmacies and how they dispense

1 the drugs?

2 A. No. It's the opposite.

3 What I'm saying is I agree -- my general
4 understanding, as you said a minute ago,
5 that they are being sued as distributors,
6 not as pharmacies.

7 Q. Okay. And looking, for
8 example, at Table 34 on the top of Page
9 77, just using Rite Aid as an example,
10 you have numbers populated in each of
11 those columns, correct?

12 A. Correct.

13 Q. So for oxycodone,
14 hydrocodone, morphine, hydromorphone,
15 oxymorphone, and other; is that correct?

16 A. Correct.

17 Q. And that would represent the
18 drugs that were flowing to Rite Aid
19 pharmacies for each of those different
20 types of drugs, correct?

21 A. Correct.

22 Q. Some of which may have been
23 distributed by Rite Aid to itself and
24 some of which may not, correct?

1 A. Correct.

2 Q. That would be true of each
3 of the rows, if you will, thinking of
4 this as an Excel, listed there, right,
5 CVS, Discount Drug Mart --

6 (Telephonic interruption.)

7 BY MS. MCENROE:

8 Q. -- HBC, Giant Eagle, Rite
9 Aid, Walgreens, and Walmart?

10 A. Yes.

11 Q. And that other column, what
12 is reflected there?

13 A. Well, the analysis is done
14 on 12 drugs. And there's five listed
15 there. So it would be the additional
16 seven.

17 Q. Did you do any work to
18 identify or examine whether the
19 medication reflected here was dispensed
20 to patients pursuant to lawfully written
21 prescriptions?

22 A. No.

23 Q. Not one way or the other?

24 A. Correct.

1 Q. And looking back at
2 Paragraph 152, there's a sentence towards
3 the middle that starts, "I have rerun."

4 Do you see that sentence?

5 A. Yes.

6 Q. "I have rerun the five
7 identification routines described above
8 assuming that the chain distributors
9 could have flagged transactions based on
10 this expanded information set and report
11 the results for this chain," and it keeps
12 going on.

13 Do you see that?

14 A. Yes.

15 Q. Where did you get that
16 assignment from?

17 A. Plaintiffs' counsel.

18 Q. So plaintiffs' counsel asked
19 you to do that?

20 A. Yes.

21 Q. Are you saying that chain
22 distributors should have flagged these
23 transactions, or you're just saying that
24 it's possible that they could have?

1 A. I'm definitely not saying
2 should. What I'm saying is if you make
3 the assumption in the previous sentence
4 that the chain distributors could see all
5 of the distributors' shipments to each of
6 the chain distributors' pharmacies, then
7 you can apply the five algorithms from
8 the previous sections to that set of
9 transactions that include not just the
10 chain distributors' transactions to the
11 pharmacies.

12 And if you did, you would
13 flag a different set of transactions.
14 You'd flag additional transactions.

15 Q. So you're not suggesting
16 that there are any particular patients
17 for whom these chain pharmacies should
18 have refused to fill prescriptions,
19 correct?

20 A. Correct.

21 Q. And you're not suggesting in
22 your report that at a certain point in
23 time or because of a certain triggering
24 transaction, any specific pharmacy should

1 have stopped dispensing a drug
2 altogether, correct?

3 A. Correct. I think that's for
4 other witnesses.

5 Q. Do you have in mind in
6 particular who you're thinking would make
7 that opinion?

8 A. No. I just mean I'm -- I'm
9 focused on the data and applying certain
10 methodologies and certain assumptions.
11 And other witnesses will -- will either
12 support or lead to a modification of
13 those assumptions. The methodologies
14 that I've laid out here are flexible
15 enough to incorporate different sets of
16 facts as they're developed for the court,
17 for the judge or for the jury.

18 Q. Well, you have five
19 approaches here. And those are the five
20 you apply, correct?

21 A. Correct.

22 Q. So if you were to apply a
23 different approach, that would require a
24 whole different set of analysis of this

1 same data, correct?

2 A. Not a whole different set.

3 There would be a tremendous amount of
4 overlap. I can give you an example. But
5 no, it would not be a whole different
6 set. It might be just a very slight
7 modification to an assumption or two. It
8 might -- of the thousands and thousands
9 of lines of code, it might -- it might
10 involve changing one or two lines of
11 code. It's not a whole new analysis.

12 Q. But presumably it would
13 change the output, so the tables, the
14 figures, the actual numbers in them would
15 need to change?

16 A. If you applied a different
17 methodology, sure.

18 Q. Let's take a look all the
19 way back to Page 6 of your report,
20 Paragraph 21.

21 A. Yes.

22 Q. And let's see. You have a
23 line that starts three lines down. It
24 starts, "In Section 10."

1 Do you see that?

2 A. Yes.

3 Q. "In Section 10, I provide
4 certain estimates regarding the total
5 aggregate shipments of opioids into Ohio
6 from 1997 to 2018."

7 Do you see that?

8 A. Yes.

9 Q. Okay. So let's head to -- I
10 think it's -- Paragraph 153 on Page 82.

11 Do you see that?

12 A. Yes.

13 Q. And above that is a heading
14 called "Excessive Shipments."

15 Do you see that?

16 A. Yes.

17 Q. Now, when you discussed this
18 Section 10 at the front of your report,
19 you did not use the word "excessive" in
20 your summary of opinions in what we just
21 looked at, correct?

22 A. Correct.

23 Q. Is that word here,
24 "excessive," your word?

1 A. Yes.

2 Q. Why did you use the word
3 "excessive" here?

4 A. Well, you have to read the
5 title in the context of the four or five
6 or eight pages that follow. And you can
7 see in what follows. I report the
8 shipments per capita, and then a couple
9 of baselines that the judge or a jury may
10 find helpful. And excessive is then
11 defined to just be the difference between
12 what you observe and those example
13 thresholds. The modeling allows for
14 variations in those thresholds, the two
15 thresholds are just examples that I've
16 given you. And then I've described the
17 difference between what was shipped per
18 capita and those baselines as excessive.

19 I -- I'm not -- I'm not
20 describing them as excessive in some
21 epidemiological sense, or -- or legal
22 sense. I'm just describing it relative
23 to the benchmarks that I've -- or
24 baselines that I've described.

1 Q. Okay. I mean I want to make
2 sure I understand the use of the word
3 excessive here. Do you literally mean
4 that it -- the data exceeds something, so
5 you're using the word excessive? Is that
6 what you're referring to?

7 A. Exactly.

8 Q. So you're not saying that
9 you think it's too much in that means of
10 excessive. You're trying to just say
11 it's above some threshold you've
12 identified?

13 A. Correct.

14 Q. Okay. So you're not making
15 a qualitative judgment about the
16 excessiveness in this section, you are
17 making a quantitative judgment?

18 A. I think that's correct.

19 Q. You are not saying in your
20 report that excessive means suspicious
21 for the purposes of suspicious order
22 monitoring, correct?

23 A. Correct.

24 Q. You are not saying that

1 excessive means unlawful in any way,
2 correct?

3 A. Correct.

4 Q. Let's take a look at
5 Paragraph 160 which is later on in this
6 section, right at the end of it, on
7 Page 88.

8 Do you see that?

9 A. Yes.

10 Q. And toward -- I would say a
11 little more than halfway down there's a
12 sentence that starts "the purpose."

13 Do you see that?

14 A. Yes.

15 Q. "The purpose of identifying
16 transactions -- to determine which
17 transactions warrant some further due
18 diligence -- is likely to only be met by
19 flagging more transactions than those
20 which are used to fill medically
21 unnecessary prescriptions. Thus the
22 decline in opioid use in Ohio and the
23 implication that more than 70 percent of
24 opioids shipped into Ohio were excessive

1 supports my identification of
2 transactions."

3 Did I read that correctly?

4 A. Yes.

5 Q. Now, I want to make sure I
6 understand what you're saying here.

7 When you are talking about
8 the purpose of identifying transactions,
9 is that the same as flagging transactions
10 like we've discussed today?

11 A. Yes.

12 Q. And you are now saying that
13 means to determine which transactions
14 warrant some further due diligence.

15 Do you see that?

16 A. Yes.

17 Q. And is that coming from you
18 or is that coming from plaintiffs'
19 counsel, that the flagging means that
20 those transactions warrant some further
21 due diligence?

22 A. I'm not sure. Maybe a
23 mixture of both. But I'm -- I'm just
24 trying to provide some context. My

1 understanding of the context. I'm not
2 suggesting that I'm a subject matter
3 expert on that issue. But I -- I'm --
4 I'm generally aware that -- that these
5 are opioids as opposed to children's toys
6 or bitcoin. And I have a general
7 understanding of the purpose of the
8 analysis. And that's all I'm trying to
9 convey there, is my general understanding
10 of the context and how Sections 9 and 10
11 relate to one another. I'm not in those
12 couple of sentences expressing an opinion
13 about what -- what is suspicious and what
14 due diligence ought to follow in a
15 suspicious that's raised.

16 Q. I may not go so far as
17 children's toys. But let's see, did you
18 compare your analysis of opioids to an
19 analysis of other medications over those
20 periods of time?

21 A. No.

22 Q. You used the phrase, in the
23 language that I had just read out, of
24 medically unnecessary prescriptions?

1 A. Yes.

2 Q. You don't define that in
3 your report, correct?

4 A. Correct.

5 Q. And you are not a medical
6 doctor?

7 A. Correct.

8 Q. And do you have any basis
9 for saying what is or is not medically
10 unnecessary of a prescription?

11 A. No. And I didn't mean to
12 imply that I did.

13 Q. Let's take a look at
14 Paragraph 154. So we're going to go back
15 a little bit in the same section.

16 A. Yes.

17 Q. And it says -- you see it,
18 it's on Page 83?

19 A. Yes.

20 Q. "Figure 21, Figure 22, and
21 Figure 23 illustrate a similar pattern.
22 In Ohio and in Cuyahoga County and Summit
23 County, per capita opioid MME increased
24 from 1997 to 2010 and thereafter

1 declined, so that per capita opioid MME
2 in 2017 was 3.7 times per capita opioid
3 MME in 1997 in Ohio."

4 Do you see that?

5 A. Yes.

6 Q. Do you know what MME means?

7 A. Yes.

8 Q. What does it mean?

9 A. Morphine milligram
10 equivalent.

11 Q. Do you have any basis to
12 know what if any proportion of the
13 population in Ohio had untreated pain in
14 1997?

15 A. No.

16 Q. Have you done any research
17 on that point?

18 A. No.

19 Q. Do you have any expertise on
20 that point?

21 A. Not on the epidemiological
22 or pharmacological or medical aspects of
23 that point. But to the extent that
24 the -- that there is publicly available

1 data or data that could be developed on
2 that point, I would have expertise in
3 analyzing that data. Maybe not
4 interpreting the data fully, but
5 certainly, so some aspect of what you
6 just described.

7 Q. Sure.

8 A. But -- but not on the
9 interpretation of such data.

10 Q. So how did you arrive at
11 1997 as opposed to 1996 or 1998?

12 A. My recollection is that the
13 retail drug summary reports go back to
14 1997. So it's the beginning of the data
15 that's publicly available.

16 Q. So there was no medical
17 reason or reason from the medical
18 community about why 1997 was serving as
19 your baseline for a number of your
20 analyses in your report?

21 A. Correct. That's just the
22 beginning of the ARCOS retail drug
23 summary report data.

24 Q. In your analysis of the

1 data, did you do any comparison between
2 what was shipped into either the state of
3 Ohio or these specific counties in Ohio
4 versus what was being dispensed to
5 patients pursuant to lawfully written
6 prescriptions in those geographies?

7 A. No.

8 Q. So in some instances in this
9 section you used 19 -- I'm sorry. Strike
10 that.

11 In some instances in this
12 section you used 1997 as the baseline.
13 And then you also used what you called
14 the 1997 to 2018 interpolated baseline,
15 correct?

16 A. Yes.

17 Q. And let's look at
18 Paragraph 155 on Page 84. And it says,
19 "A possible upper bound on the medically
20 necessary opioid MME per capita baseline
21 is the per capita MME interpolated from
22 1997 to 2018. This baseline assumes that
23 all prescriptions of opioids in 1997 and
24 in 2018 were medically necessary and that

1 the drivers of legitimate opioid use,
2 e.g., aging of the population evolved
3 gradually rather than discontinuously
4 over time.

5 Plaintiffs allege that
6 opioid consumption in 2018 remained
7 excessive and was still influenced by the
8 defendants' alleged fraudulent conduct.

9 Did I read that correctly?

10 A. Yes.

11 Q. Did you decide that the
12 interpolation from 1997 to 2018 was a
13 possible upper bound?

14 A. Yes.

15 Q. On what basis?

16 A. Well, I observed MME per
17 capita consumption in 1997. I observed
18 it in 19 -- in 2018. And I observed the
19 dramatic increase, and then decline
20 between those two dates.

21 And in addition to just
22 observing that dramatic increase, I
23 thought the court might be interested in
24 seeing how much of that increase was in

1 excess of -- of these two example base
2 lines, that could be varied with
3 different assumptions.

4 I might have thought of a
5 third baseline or a fourth baseline. But
6 these are the two that I thought of. And
7 so I offer them as possible upper and
8 lower bounds. Someone could suggest
9 something different. But this is what --
10 what I thought and the rationale for it.

11 I think you've already read
12 into the record.

13 Q. And this came from you, not
14 from plaintiffs' counsel?

15 A. Yes.

16 Q. So in this paragraph, and in
17 this section, you're talking about what
18 you deem to be medically necessary at
19 certain points in time, correct?

20 A. No. That's not what that
21 paragraph says.

22 Q. So if I were to take the
23 interpolated line between 1997 and 2018,
24 I recognize that you're treating that as

1 what you call an upper bound, correct?

2 A. A possible upper bound.

3 Q. Possible upper bound. So

4 are you of the opinion that any

5 distribution of opioids above that

6 possible upper bound was not medically

7 necessary?

8 A. No. That's not what it

9 says.

10 Q. Well, I'm asking you. Is

11 that your intention through what you're

12 doing here?

13 A. No.

14 Q. So of what consequences the

15 analysis that you're doing in this

16 section?

17 A. Well, I think of it in two

18 parts. I think that the first part of

19 Section 10 illustrates for the court, for

20 the jury, this enormous hump in opioid

21 per capita consumption in Ohio, in

22 Cuyahoga and Summit. And if Section 10

23 ended there, that might be of service.

24 Then, in addition, I'm

1 saying is there something more that the
2 data from the retail drug summary reports
3 can tell us? And in particular, how much
4 of that tremendous hump in the
5 consumption could be thought of as in
6 excess of a reasonable baseline.

7 And I -- I offered two
8 alternatives. Someone could say that the
9 2018 levels are still excessive or
10 someone to say that the 2018 levels
11 reflect underprescribing or just about
12 are exactly right. I'm not taking a
13 position on which of those three
14 possibilities are the case.

15 Q. Okay.

16 A. I'm also not even taking a
17 position on whether the drivers of
18 legitimate or medically necessary opioids
19 evolved gradually. I'm just saying if
20 you assume they evolve gradually and you
21 assume that the 2007 -- the 1997 and 2018
22 levels are about right, then this is an
23 interpolated benchmark and anything above
24 that is excessive.

1 Again, not expressing an
2 opinion on any kind of epidemiological,
3 any public health, any legal, any medical
4 issue in the case. I'm just reporting
5 out the data. And this is an
6 illustration of that.

7 I'm reporting what the data
8 would tell us if you apply these
9 assumptions in that paragraph you just
10 read.

11 Q. So it's fair to say that you
12 are not taking into account how many new
13 opioid formulations were approved by the
14 FDA between '97 and 2018?

15 A. No, I don't think that's
16 true.

17 Q. You think you are taking
18 that into account, in your interpolated
19 line you're using?

20 A. Well, sure. To the extent
21 that the 2018 levels are about three
22 times the 1997 levels, if -- and this is
23 per capita, so we're already controlling
24 for the change in the population in Ohio

1 and these counties. So the fact that the
2 2018 levels are so much higher than the
3 1997 levels, even after the big decline,
4 may reflect the additional approved drugs
5 or treatments that you've just mentioned.

6 Q. Did you specifically take
7 into account whether any new opioid
8 formulations were approved by the FDA
9 between 1997 and 2018?

10 A. Not beyond what's reflected
11 in the 2018 data.

12 Q. Aside from ways that it
13 might be reflected in the data itself,
14 did you take into account health
15 insurance coverage for any of these drugs
16 over time?

17 A. No.

18 Q. Aside from how any of this
19 may be reflected in the data itself, did
20 you take into account about the growth of
21 cancer or other pain-related diseases
22 during that time?

23 A. Yes. In addition to how it
24 would be reflected in the 2018 data, my

1 upper -- possible upper bound assumes
2 that the evolution in those conditions or
3 the acceptance of opioid use for
4 treatments evolved gradually rather than
5 discontinuously as you read.

6 Q. And did you take that into
7 account somehow in calculating that
8 interpolated baseline from '97 to 2018?

9 A. Yes, exactly.

10 Q. But how? So aside from just
11 looking at the data itself, did you
12 qualitatively take into account
13 increases, if any, in cancer or other
14 pain-related diagnoses over that time?
15 Did you go out and look at studies for
16 these things or talk to experts in the
17 field about this? Did you take that into
18 account other than just crunching the
19 data numbers?

20 A. Well, those are two
21 different questions. But the answer to
22 your last question is no.

23 Q. The answer to the first
24 question?

1 A. Yes.

2 I'm sorry. The answer to
3 the first question is yes. The answer to
4 the second question is no.

5 Q. And your answer to the first
6 question is yes because you think that's
7 reflected in the data that you used to
8 get to the 2018 point?

9 A. No, not that only. It's
10 also the assumption that those factors
11 evolved gradually over time, and so I'm
12 interpolating between those two values,
13 the 1997 level and the 2018 level, by
14 assuming a constant percentage growth.

15 Q. So it shakes out to be a
16 near linear growth between 1997 and 2018,
17 it looks like?

18 A. Right. It's a constant
19 annual growth, so the line curves a
20 little bit. But yes.

21 Q. And on what basis do you
22 make that assumption?

23 A. That it's a useful
24 illustration of a potential baseline.

1 Q. So you had the start --

2 sorry -- strike that.

3 You had the start data point

4 in '97 and the end data point in 2018.

5 What methodology did you use to chart the

6 curve as between '97 and 2018?

7 (Telephonic interruption.)

8 THE WITNESS: Well, you're

9 probably familiar with the rule of

10 72, which says if you take a

11 percentage growth rate in

12 percentage terms and divide it

13 into 72, it gives you the number

14 of years it takes for something to

15 double. So let me give you an

16 example.

17 Let's say that the ending

18 value is twice the beginning

19 value. And you've got a 12-year

20 period. That would mean that six

21 percent compound growth over

22 12 years would cause the ending

23 value to be twice the beginning

24 value.

1 And so, what I did was
2 really a variant on that. I've
3 got the 2018 per capita
4 consumption. I've got the 1997
5 per capita consumption. The ratio
6 of those two raised to the
7 power -- you do this in Excel --
8 but raised to the power of one
9 divided by the number of years
10 would give you that constant
11 annual growth rate.

12 That's the calculation that
13 I did, and then used that constant
14 annual growth rate each year
15 applied to the 1997 starting value
16 and each prior year as you move
17 forward, and you end up at the
18 2018 level.

19 All I'm doing is saying, if
20 it's true, if -- I'm assuming if
21 it's true that the 1997 levels are
22 medically necessary or legitimate
23 or whatever term you want to use,
24 and the 2018 levels are medically

1 necessary or legitimate, and the
2 drivers of that legitimate opioid
3 use evolved gradually over time,
4 in my example a 6 percent growth
5 rate would be reasonable as
6 opposed to some discontinuous
7 change in what would be medically
8 necessary or legitimate.

9 I am not expressing an
10 opinion anywhere here about what
11 is medically necessary or
12 legitimate. I'm just trying to
13 provide some context, some
14 description of how this model
15 might be useful to the court.

16 BY MS. McENROE:

17 Q. How did you choose to apply
18 that methodology to get from 1997 to
19 2018, rather than, for example, a
20 straight line or a curve that curved in
21 the other direction? I mean, concave
22 instead of convex and vice versa. On
23 what basis?

24 A. Well, it's really just my

1 intuition, that these were two useful
2 examples. I could implement the
3 alternatives that you suggest. They are
4 real -- really trivially different than
5 what I did. And if I did those four,
6 there could be four more examples.

7 What I'm describing here is
8 a general methodology that might be
9 useful to the court. And I've provided
10 two illustrations, but you can -- you can
11 specify other illustrations.

12 Q. What was the basis of your
13 expertise for interpolating that line in
14 that way, for this particular setting?

15 A. Well, I have a Ph.D. in
16 economics. I have -- I have probably had
17 hundreds of semester hours of
18 arithmetic --

19 Q. Sure. So let me stop you
20 there. I -- I don't mean to quibble
21 about your computational bases for doing
22 that.

23 I'm saying from a
24 methodological standpoint, in terms of

1 picking how to get from one point to
2 another in Figure 24, which is on
3 Page 85, I think it might be the easiest
4 way for us to look at this. On what
5 basis are you doing it in this way?

6 A. I'm not being articulate. I
7 thought I had answered that a whole bunch
8 of times.

9 Q. Yeah, so let me ask the
10 question a different way, because I'm not
11 trying to say from a math standpoint how
12 you get from one line to the other. What
13 I'm trying to say is, from a healthcare,
14 from an epidemiology perspective, from a
15 pharmaceutical industry perspective, how
16 is it that you're telling the court that
17 this is the right line to be looking as
18 an upper bound?

19 A. I'm not doing that. I've
20 said that several times today. I'm not a
21 subject matter expert. I'm not offering
22 an opinion in any section of the report,
23 but including on this page in that
24 figure, based on some subject matter

1 expertise. Other witnesses will be
2 offering the court that expertise.

3 I'm just saying, if the
4 expertise and the facts are developed
5 that support these assumptions, this is
6 the baseline. If -- if the facts are
7 developed in a different way, then a
8 variant on this would be developed. I'm
9 just describing the general methodology
10 and two illustration.

11 Q. Thank you. So on Page 86,
12 in Paragraph 159 that we were just
13 looking at a minute ago. There is a
14 sentence towards the bottom that says,
15 "My estimates."

16 Do you see that?

17 A. Yes.

18 Q. It says, "My estimates of
19 excessive opioid shipments into Ohio can
20 be varied to reflect how much if any of
21 the increase from 1997 to 2008 in per
22 capita MME above the 1997 levels was
23 medically justifiable."

24 Is that what you were just

1 referring to?

2 A. Yes. Well, that would be an
3 example of it, yes.

4 Q. Okay. And so you are not
5 suggesting that the numbers that you have
6 reflected here for an upper bound or a
7 baseline is medically necessarily the
8 appropriate line. You are giving this as
9 a frame of reference?

10 A. Yes. We might use the terms
11 a little bit differently, but they are
12 illustrations. You could imagine even
13 above or below the '97 levels or the 2018
14 levels as being legitimate or medically
15 necessary.

16 All I'm really doing is
17 saying you can get from '97 to 2018 a
18 couple of different ways. You could get
19 it between those two levels, and other
20 ways as well.

21 And however you create the
22 baseline, whatever those baseline MME per
23 capita are, you could subtract those
24 baseline amounts each year from what's

1 actually shipped into Cuyahoga and
2 Summit, and get an excess. I'm not --
3 I'm not opining about --

4 Q. Sure.

5 A. -- what the right baseline
6 is or what the right resulting excessive
7 amount is.

8 Q. And when you say excessive,
9 again that's in the way we were talking
10 about it earlier this afternoon,
11 excessive as in being higher than
12 something, so in excess of something?

13 A. Well, as I'm using it that's
14 correct. I'm just calculating the
15 difference between two numbers and
16 calling them excessive.

17 Now, at trial, if -- if the
18 jury were to conclude that one of these
19 baselines was correct or some variant on
20 it, then the amount above that would seem
21 to me to be excessive in their judgment.
22 But that's not something that -- that I'm
23 opining on in any way. And I'm not using
24 the term that way.

1 Q. And there would need to be
2 other expert, in fact, evidence in the
3 record to be able to get to that point.
4 You can't just get there from what you
5 have in your expert reports, correct?

6 A. Absolutely.

7 Q. Okay. So let's take a look,
8 still, I'm on Page 87 now, and you have a
9 number of bullet points. And I think
10 this is technically still part of
11 Paragraph 159. And you have a number of
12 bullet points here on 87 and then the top
13 of 88 that use the word "excessive."

14 And is this all throughout
15 your report consistent with how we've
16 been discussing the use of the term
17 "excessive" here, not that you're making
18 a qualitative judgment, but that you're
19 making a quantitative observation?

20 A. Yes. I'm not using the term
21 "excessive" in -- in any -- in any sort
22 of liability sense, or sense that it
23 might be used in the argument. It's just
24 a difference in two numbers.

1 MS. McENROE: Can we go off
2 the record for a quick second?

3 THE VIDEOGRAPHER: Off the
4 record at 3:20 p.m.

5 (Short break.)

6 THE VIDEOGRAPHER: We are
7 back on the record at 3:23 p.m.

8 BY MS. McENROE:

9 Q. Dr. McCann, I'm going to
10 hand you what we've marked as Exhibit 6.

11 (Document marked for
12 identification as Exhibit
13 McCann-6.)

14 MS. McENROE: I have another
15 copy.

16 BY MS. McENROE:

17 Q. This is another expert
18 report submitted by plaintiffs in this
19 case on behalf of Professor David Cutler.
20 You mentioned Professor Cutler earlier
21 today, correct?

22 A. Yes.

23 Q. Have you seen this report
24 before?

1 A. Yes.

2 Q. In final form as submitted?

3 A. Only in final form as
4 submitted.

5 Q. And when did you see
6 Dr. Cutler's report?

7 A. Sometime after March 25th.

8 Q. I gave you -- I think the
9 version I gave you has a little purple
10 flag in it?

11 A. Yes.

12 MS. McENROE: And for
13 plaintiffs' counsel's benefit,
14 it's on -- at Table J-1 in
15 Appendix 3 of Dr. Cutler's report.

16 BY MS. McENROE:

17 Q. Do you see that?

18 A. Yes.

19 Q. Does this table look
20 familiar to you?

21 A. I believe I saw this table
22 or this page sometime after my report was
23 filed.

24 Q. Did you prepare this table?

1 A. No.

2 Q. Did you provide this to
3 Professor Cutler?

4 A. I didn't personally.

5 Q. Did somebody from SLCG
6 provide this to Professor Cutler?

7 A. Not to Professor Cutler. It
8 may be that a table, something like that,
9 was provided to the counsel that we were
10 interacting with. And it was provided to
11 counsel Professor Cutler was interacting
12 with. And Professor Cutler then
13 included, I don't know, but I did not and
14 my staff did not have any communication
15 with Professor Cutler.

16 Q. I looked, but I couldn't
17 find this Table J-1 in any of your expert
18 reports submitted in this case or any of
19 the appendices. Do you have any reason
20 to think that it is included in any of
21 your expert reports or any of your
22 appendices you've included?

23 A. I don't know one way or the
24 other.

1 Q. So this table could be, but
2 you don't know?

3 A. Correct.

4 Q. And on what basis are you
5 saying that?

6 A. Well, because I -- I
7 provided you with something like 5,000
8 tables. And I can't say with certainty
9 that this table, or substantially this
10 table or content that could be used to
11 easily create this table isn't anywhere
12 in any -- my report or my two
13 supplements.

14 Q. Let's take a look --

15 A. I could do a search for that
16 if you'd like, but I just can't tell you
17 for sure one way or the other as I sit
18 here.

19 Q. Sure. Let's take a look at
20 your supplemental expert report submitted
21 on April 3rd.

22 A. Yes.

23 Q. And earlier today you
24 described this to me as supplemental

1 tables in the body of your report.

2 Figures and tables used in depositions,
3 right?

4 A. Yes.

5 Q. You had some summary tables?

6 A. Yes.

7 Q. Does this table at J-1 in
8 Professor Cutler's report appear anywhere
9 in your first supplemental report, to
10 your knowledge?

11 MR. MOUGEY: Asked and
12 answered.

13 BY MS. McENROE:

14 Q. It's okay. You can answer.

15 MR. MOUGEY: It depends on
16 how many times we ask it. I
17 haven't said much today. But, I
18 mean, he just said he didn't know.

19 MS. McENROE: Well, I'm
20 narrowing the question a little
21 bit. That was a broad --

22 MR. MOUGEY: If he doesn't
23 know if he was anywhere, how is he
24 going to know if it was in this

1 report?

2 MS. McENROE: You can object
3 to form. It's memorialized on the
4 record.

5 MR. MOUGEY: That's the
6 first thing I've said -- I mean, I
7 just -- today. I think I've
8 objected three times in --

9 MS. McENROE: I appreciate
10 that.

11 MR. MOUGEY: -- six hours.
12 Y'all should read your
13 transcripts. Y'all object every
14 13 seconds. So I just -- I
15 just -- I mean, it's asked and
16 answered. He said he didn't know
17 where it was.

18 MS. McENROE: Okay. He can
19 answer now. Thank you.

20 MR. MOUGEY: You're welcome.

21 BY MS. McENROE:

22 Q. Go ahead.

23 A. I don't know.

24 Q. Let's take a look back to

1 your March 25th report, in particular, to
2 Paragraphs 181, 182, and 183, which are
3 towards the end at Page 93 to 94. Let me
4 know when you're there.

5 A. I'm there.

6 Q. And this section is labeled
7 "Conclusion," correct?

8 A. Yes.

9 Q. And Paragraph 181 says,
10 "Based upon my comparison of the ARCOS
11 data produced by the DEA, the public
12 ARCOS retail drug summary reports, and
13 the defendants' transactional data, I
14 conclude that -- after correcting a
15 relatively small number of records -- the
16 ARCOS data produced by the DEA is
17 complete and reliable."

18 Did I read that correctly?

19 A. Yes.

20 Q. That's an opinion you're
21 advancing in this litigation?

22 A. Yes.

23 Q. And then Paragraph 182, "I
24 further conclude that Cardinal Health's

1 transactional" -- "transaction records
2 produced in discovery are a reliable
3 source of transactions data before 2006
4 and after 2014. More generally, with the
5 exception of AmerisourceBergen, the other
6 defendants' transaction data is also a
7 reliable source of transaction data for
8 the periods covered by its production."

9 Did I read that correctly?

10 A. Yes.

11 Q. And that's an opinion that
12 you're advancing in this litigation?

13 A. Yes.

14 Q. Paragraph 183, "The ARCOS
15 data can be used to identify transactions
16 in a state, county, zip code, or
17 individual pharmacy meeting certain
18 criteria as I have illustrated above."

19 Did I read that correctly?

20 A. Yes.

21 Q. And that's an opinion that
22 you're advancing in this litigation?

23 A. Yes.

24 Q. Are you advancing any other

1 opinions in this litigation?

2 MR. MOUGEY: Objection.

3 THE WITNESS: Well, yes, of
4 course. These are one or
5 two-sentence summaries of what in
6 the body of the report might be 20
7 or 30 pages. And so I think at a
8 very high level these summarize my
9 opinions.

10 BY MS. MCENROE:

11 Q. Are there any other high
12 level categories of opinions that's not
13 articulated here in your conclusion
14 section in your primary report?

15 A. Only to the extent they are
16 not otherwise discussed earlier in this
17 report or in the two supplements.

18 Q. Is there anything, sitting
19 here today, that you'd like to correct or
20 modify in your original report or either
21 of your two supplements? Taking into
22 account the errata sheet for Page 35.

23 A. Well, I noticed a typo here
24 or there. For instance, as you were

1 reading Paragraph 181 into the record,
2 there should be an apostrophe after
3 defendants. You read it as
4 transactional. It says transaction data.

5 Q. Sorry about that.

6 A. So there's little quibbles
7 like that. And there's a place where I'm
8 talking about a three-digit zip code in
9 Arizona, it's 851. And in the paragraph,
10 851 is mentioned three or four times.

11 And one time a four gets slipped in
12 there. It's 8451 or something like that.

13 It's obvious that there
14 should be an apostrophe there or that
15 four shouldn't have been in the
16 three-digit zip code.

17 Similarly, there might be an
18 example here or there of something that,
19 upon reflection, I might change. But
20 they would be trivial. It would be
21 literally typos, the way the typos are
22 that I've just described to you. But
23 there's nothing material that I would
24 change in any of these reports.

1 Q. Any -- anything come to mind
2 in particular of something that you would
3 change? And I'm not talking about
4 typographical errors.

5 A. No.

6 Q. Okay. Can we flip back to
7 Paragraph 22 in your primary report.

8 In both this report and in
9 your second supplemental report, you
10 include the same language that's at
11 Paragraph 22. It's the page -- it's at
12 the top of Page 7.

13 It says, "I continue to
14 review documents and gather information
15 and reserve the right to update my
16 analysis and opinions based upon that
17 further review of documents and based on
18 any new information -- including possibly
19 reports of other experts -- I may
20 receive."

21 Do you see that?

22 A. Yes.

23 Q. Do you have a present
24 intention to supplement your report for a

1 third time?

2 MR. MOUGEY: Objection.

3 THE WITNESS: Well, almost
4 definitely, yes.

5 BY MS. McENROE:

6 Q. And tell me what you mean by
7 that.

8 A. Well, just yesterday
9 AmerisourceBergen produced data that was
10 supposed to be produced previously and
11 which I called attention to in this first
12 report.

13 I also called attention to
14 other defendants whose production seems
15 to be missing months or NDC codes or even
16 years.

17 And to the extent what I'm
18 trying to do here is reconcile the data,
19 the defendants' transaction data produced
20 in discovery with the ARCOS data and
21 create a dataset that's reliable that the
22 court can rely on, if the defendants --
23 well, first, I will want to review the
24 data that AmerisourceBergen produced

1 yesterday and see if -- it's clear I was
2 showing you a figure earlier, we were
3 looking at, where that new data would
4 fill in a bunch of yellow bars on that
5 figure.

6 It also would change some of
7 the numbers in, for instance, Table 13
8 and 14.

9 So for this report to be
10 accurate now, given the updated data that
11 was produced after this report was
12 produced, I'll have to make some changes
13 to those two tables. And if other
14 defendants produce other data, I would
15 have to update the figures and tables to
16 reflect that.

17 And I understand that your
18 experts will be filing expert reports
19 this weekend. And if combing through
20 tens of thousands of lines of code,
21 someone identifies a line of code that
22 maybe we should have written differently
23 or inserted in a different order, I'll
24 evaluate that, with -- entirely with the

1 goal of ending up with a set of
2 transaction data that the court can rely
3 on.

4 Q. Aside from data issues or
5 issues identified by defendants' experts,
6 do you have any intention to supplement
7 your expert report again based on other
8 of plaintiffs' expert reports?

9 A. No.

10 Q. Other than potentially
11 correcting for data that's been produced
12 only recently or potential issues
13 identified by defendants' counsels, do
14 you have any other substantive intention
15 to modify or supplement your report? And
16 what I mean by that is, for example,
17 changing one of the five approaches
18 you've used?

19 A. No. Although in your
20 question I think you have to include not
21 only data that was only produced
22 recently, yesterday, but additional data
23 that might be produced by the defendants
24 in the future.

1 Q. Going forward?

2 A. Yes.

3 Q. Okay. Is there any reason
4 why you could not answer my questions
5 truthfully today or any of the other
6 defendants' questions today or tomorrow
7 truthfully?

8 A. No. And I'm -- I'm doing my
9 best. If I'm understanding them, then
10 I'm answering them truthfully.

11 Q. I appreciate that.

12 And you understand that you
13 have the obligation to tell us if
14 anything in your report is false or
15 inaccurate?

16 A. Absolutely.

17 Q. Okay. And is it possible
18 that in relying on your staff for some of
19 the underlying work that they did, that
20 they could have made mistakes or errors?

21 A. Well, we're all humanly
22 imperfect. We're certainly doing our
23 very best to create this dataset, but it
24 may be there would be some de minimus

1 issue that you would identify and I would
2 accept as something we could do
3 differently or a judgment that could be
4 exercised reasonably in an alternative.

5 Q. And you're saying de
6 minimus. But it's also possible they
7 could have made a big mistake
8 hypothetically, correct?

9 A. It's -- I don't believe that
10 that's the case. But I can't say with
11 100 percent certainty that that is not
12 the case. I -- I don't believe it's the
13 case.

14 Q. But it's possible which
15 would make your opinions, some of them at
16 least, could potentially be untrue and
17 you wouldn't know it?

18 A. Well, it's sort of
19 topological as you've posed it. And so I
20 can't disagree with it. But I -- I do
21 not believe that there is any material
22 error that would affect any of the
23 conclusions. At a high level, the
24 conclusions are -- seem unobjectionable

1 until at least you get to Section 9. And
2 I think that we have the same goal up
3 through Section 9, and in Section 9, all
4 I'm doing is applying methodologies to
5 the best of our ability.

6 If it turned out that those
7 methodologies are not appropriate or some
8 slight variation on those methodologies
9 is warranted, we would do that for the
10 court as well.

11 Q. And you've previously had an
12 experience where your staff made a
13 significant error in a case in which
14 you've testified, correct?

15 A. I'm not sure what you're
16 referring to.

17 Q. You're not sure, with a
18 federal court having called your opinions
19 fraudulent, you don't recall that?

20 A. Oh my gosh.

21 I recall a situation where a
22 federal court said that and an appeals
23 court said that there was no basis for
24 that.

1 Q. Well, the federal court said
2 that your opinions were fraudulent
3 because they said you testified knowing
4 they were false at the time. But the
5 appellate court said it wasn't that you
6 knowingly testified that it was false,
7 and I'm not accusing you of having done
8 that, but the Fifth Circuit was that it
9 was that your staff had made a
10 significant error leading you to testify
11 inaccurately; is that correct?

12 MR. MOUGEY: Objection.

13 THE WITNESS: No, that's
14 still not a correct
15 characterization of the Fifth
16 Circuit's opinion.

17 BY MS. MCENROE:

18 Q. But you know what I'm
19 talking about?

20 A. I do. Of course. I lived
21 it for a couple of years.

22 (Document marked for
23 identification as Exhibit
24 McCann-7.)

1 BY MS. McENROE:

2 Q. So I'm going to hand you
3 what I'm marking Exhibit 7.

4 A. Thank you.

5 Q. This is the District Court
6 opinion, not the Fifth Circuit opinion.
7 But this is the District Court opinion
8 from Morgan Keegan & Company versus
9 Garrett, correct?

10 A. Correct.

11 Q. And is this the case we were
12 just talking about, where the District
13 Court referred to your testimony as
14 having been fraudulent, right?

15 A. Yes.

16 Q. And if we could, you can
17 hold that aside. And can you pull out
18 the exhibit with your resumé, please. So
19 that's Appendix 1 to your March 25th
20 report.

21 A. Yes.

22 Q. And which exhibit number was
23 that for the record?

24 A. 4.

1 Q. 4. And I looked and looked,
2 and I didn't see this Morgan Keegan &
3 Company case referenced in your resumé.
4 Instead what I saw was on Page 109 you
5 have a line that says, "Dr. McCann has
6 testified before more than 300 NASD, NYSE
7 and FINRA arbitrations."

8 Am I correct in that?

9 A. Correct.

10 Q. Okay. So you have in here
11 300 cases from FINRA and other
12 circumstances listed, but not fully
13 listed out one by one, including the
14 underlying opinion that led to the appeal
15 to the District Court in Texas, correct?

16 A. Correct.

17 Q. Okay. And so looking at
18 what you've disclosed with your expert
19 reports, nowhere do you identify that
20 there's an opinion that counsel could
21 then pull and look at, in which a
22 District Court judge, even if they were
23 overturned, had declared you as having
24 given fraudulent testimony, correct?

1 MR. MOUGEY: Objection.

2 THE WITNESS: That's not a
3 correct characterization of this.

4 I did not testify before
5 Judge Hughes. In fact, I
6 attempted to get a day in his
7 court and it was denied. I have
8 not, in the last 15 years,
9 itemized the FINRA arbitrations I
10 testify in; I've now testified in
11 over 400.

12 So years before the Garrett
13 case, my resumé looked exactly
14 like it does now, where it would
15 say McCann has testified in 100
16 FINRA arbitrations, 200, 300. I
17 did not testify in Judge Hughes'
18 court, although I certainly tried
19 to.

20 BY MS. MCENROE:

21 Q. But that's not the only
22 instance in which you've had an issue
23 with the federal court looking at your
24 opinions, correct?

1 So for example, I'm talking
2 about the Freddie Mac litigation from the
3 Southern District of New York in 2012.

4 A. Yes.

5 Q. Do you recall that case?

6 A. Yes.

7 Q. In which the judge found
8 "McCann's analysis changed so many times
9 in important ways and was so internally
10 inconsistent that I found it unreliable
11 and unpersuasive."

12 Do you remember that?

13 A. Yes.

14 Q. Okay. And in that
15 litigation you issued two reports,
16 correct?

17 A. Correct.

18 Q. And in this litigation
19 you've already issued three reports and
20 you've testified you might provide more
21 in the future, correct?

22 A. Yeah, I don't think that
23 they line up the way you are implying,
24 but it is true that I filed a report and

1 two small supplements in this case.

2 MS. McENROE: I'd like to
3 take a break.

4 THE VIDEOGRAPHER: Off the
5 record at 3:43 p.m.

6 (Short break.)

7 THE VIDEOGRAPHER: We are
8 back on the record at 4:00 p.m.

9 - - -

10 EXAMINATION

11 - - -

12 BY MR. EPPICH:

13 Q. Dr. McCann, my name is Chris
14 Eppich, I represent McKesson, one of the
15 distributors in this litigation. I'll
16 have a few questions for you this
17 afternoon. I -- there have already been
18 quite a few questions. I'm going to do
19 my best not to repeat what -- what we've
20 heard already today. But I hope you'll
21 bear with me.

22 You testified earlier today
23 that you had spoken with some former DEA
24 employees?

1 A. Yes.

2 Q. You mentioned Mr. Rafalski;
3 is that correct?

4 A. Yes.

5 Q. Have you ever spoken with
6 Mr. Joe Rannazzisi?

7 A. Yes.

8 Q. On how many occasions?

9 A. Just once I think.

10 Q. And when was that?

11 A. Sometime last summer or
12 fall.

13 Q. Was Mr. Rannazzisi employed
14 by the DEA when you spoke with him?

15 A. I don't think so.

16 Q. Was he a consultant in the
17 case when you spoke with him?

18 A. I don't know, but I think
19 so.

20 Q. Who else was present when
21 you spoke with Mr. Rannazzisi?

22 A. Oh, there were a number of
23 people, somewhere between 30 and 40
24 people. I don't know who all they were.

1 Q. Is this the -- are you
2 referring to the same meeting that you
3 met with the three or four other experts
4 as well as a number of plaintiffs'
5 counsel?

6 A. No. It was a different
7 meeting.

8 Q. Who was present at this
9 meeting with 30-some-odd people in it?

10 A. Well, it was primarily
11 plaintiffs' counsel and some of their
12 consultants. I wasn't introduced to
13 everybody, so I don't know who all was
14 there. But generally plaintiffs' counsel
15 and maybe some consultants working for
16 plaintiffs' counsel.

17 Q. And what was the purpose of
18 the meeting?

19 A. I don't know. I didn't call
20 the meeting.

21 Q. Do you remember any topics
22 that were discussed during this meeting?

23 A. Yes.

24 Q. What were those topics?

1 A. Most or all of the
2 discussion dealt with the ARCOS data,
3 what had been produced, what additional
4 data might be produced. I'm not sure of
5 that second topic. I'm not sure if we
6 received all of the data that we
7 ultimately received. The last of that
8 data was in August of 2018. So I'm not
9 recalling precisely whether this meeting
10 was shortly before or shortly after.

11 I think -- I think it was
12 the day of my mother's funeral, which was
13 June 12th or 10th or the day after. I
14 returned from Canada where I grew up for
15 that meeting. It was in my office.
16 There were about 30 people there. I
17 wasn't -- I wasn't entirely clear on what
18 was going on. I was dealing with other
19 issues.

20 And I believe Mr. Rannazzisi
21 was at that meeting. I remember meeting
22 him at our break.

23 Q. And did he speak to the
24 group at this meeting?

1 A. Not in any sort of formal
2 way. There was an open discussion, and
3 he may have contributed a thought or two
4 to that discussion, but not -- not a
5 presentation or some lengthy discourse.

6 Q. So there was a meeting
7 around June 12th of 2018 that you had
8 attended with some of the DEA
9 representatives. There was another
10 meeting that you mentioned earlier where
11 you met with some consultants and experts
12 involved in this case.

13 Were these the only two
14 meetings where -- that you attended where
15 DEA employees or former DEA employees
16 and/or experts were present?

17 A. I'm sorry, I offered you the
18 June 10th or June 12th date. I could be
19 precise, because I recall the connection
20 to the service in Canada.

21 I could be more precise on
22 that date. So just allow me to say I
23 think that's the date. And if you're
24 interested, if it's important to you I'll

1 get you the precise date.

2 No. But in answer to your
3 question, no, there were -- there was at
4 least one or two other instances where I
5 met with former DEA employees.

6 Q. Did you meet with a former
7 DEA employee named Kyle Wright?

8 A. I don't know. I don't
9 recognize that name.

10 Q. Mike Mapes?

11 A. I don't recognize that name.

12 Q. Did you meet with Stacy
13 Harper-Avilla?

14 A. I don't know. I don't
15 recognize that name. I did meet -- so
16 the DEA employs that I recognized or
17 understood to be DEA employees are four
18 or five men and one woman, but I don't
19 know if that's the person that you've
20 just identified. I don't recognize that
21 name.

22 Q. Did you meet with Katherine
23 Chaney?

24 A. Same answer. I don't

1 recognize that name.

2 Q. Frank Younker?

3 A. I think so. One of the DEA
4 employees, former employee's name was
5 Frank. And that may be the person that
6 you're referring to.

7 Q. Is the person that you're
8 thinking of a consultant to the
9 plaintiffs in this litigation?

10 A. Was at the time anyway.
11 It's a year ago now or nearly a year ago.

12 Q. Did you meet with a former
13 DEA employee by the name of Jim Geldhof?

14 A. I think so. That name
15 sounds familiar.

16 Q. How about David Schiller?

17 A. Maybe, although that name is
18 not familiar to me.

19 Q. Christine Sannerud?

20 A. Not that I'm aware. The
21 name is not familiar to me.

22 Q. Lou Milione?

23 A. I don't think I recall that
24 name. That's not familiar to me.

1 Q. Have you ever spoken with
2 DEA employees Keith Martin?

3 A. Not that I'm aware of.

4 Q. How about Tom Prevoznik?

5 A. Not that I'm aware of.

6 Q. June Howard?

7 A. Not that I'm aware of. Let
8 me explain why I say I'm -- "not that I'm
9 aware of." I was on a telephone call
10 very earlier with -- I mentioned earlier
11 today with two or three or four people
12 from the DEA. I don't know how many
13 people were on the call, but set up by
14 the plaintiffs' attorneys to discuss data
15 that we might be receiving. So it was
16 back in February or March of last year.

17 And I didn't take notes of
18 the names of the people who were on the
19 call. There was at least one female
20 voice and at least one male voice that I
21 understood to be from the DEA. I don't
22 know what their names were.

23 Q. Generally did all of your
24 conversations with these former DEA

1 employees involve ARCOS data?

2 A. Yes.

3 Q. And specifically in those
4 conversations, what did they tell you
5 about ARCOS data?

6 A. Nothing of substance that
7 sticks with me. Nothing that informs any
8 of the opinions that I expressed in my
9 reports or that we discussed earlier
10 today.

11 There was a lot of kind of
12 telling war stories standing around the
13 watercooler about the ARCOS data. I
14 don't recall anything of substance. As I
15 said, nothing that informs any of the
16 opinions that I expressed.

17 Q. Did any of the war stories
18 include any of the defendants in this
19 litigation?

20 A. I don't recall.

21 Q. Do you recall the war
22 stories involving the distributors
23 McKesson or Cardinal Health or
24 AmerisourceBergen, for example?

1 A. No, I'm sorry, I don't
2 recall. What I recall was more the
3 difficulty of in the field getting quick
4 pulls on the ARCOS data and how difficult
5 the ARCOS data was to -- was for them to
6 access and produce reports from.

7 It was from very early on in
8 our accumulation of the data and
9 processing and understanding of the data.
10 And so they were in some sense
11 foreshadowing for us the data that we
12 were to receive. We end up with kind of
13 a different experience with that data
14 than they had. But they were conveying
15 their experience with the data. That's
16 what I recall.

17 Q. And to be clear, their
18 experience with the data, or at least the
19 experiences that they were discussing
20 with you from their time in the field
21 offices, they were describing ARCOS data
22 and reports as difficult to obtain?

23 A. Well, those were my words.
24 I don't recall a year later now, a casual

1 conversation, the exact words that were
2 used. Just that -- that from the field
3 offices that they would request a report,
4 and that it took some time.

5 So difficult to obtain, I
6 don't mean that there was a lot of
7 paperwork to fill out or that it took
8 months, but it wasn't instantaneous or in
9 minutes the way we can create reports
10 from this ARCOS data today given our data
11 capabilities.

12 Q. And did they describe to you
13 or tell you when a change happened at DEA
14 where ARCOS data was more readily
15 available to them?

16 A. Well, I think that assumes
17 facts not in evidence. I don't recall
18 them telling me that things have changed.
19 I just am describing to you what I recall
20 them conveying to me about their
21 experience and nothing that particularly
22 sticks with me. That's -- that's the
23 only part of the discussion that sticks
24 with me. And none -- none of that

1 informs any of the opinions that I
2 expressed -- that I hold or express.

3 Q. Do you remember any other
4 topics that you may have discussed with
5 these former DEA employees?

6 A. No.

7 Q. If we could turn to
8 Exhibit 2 or 3, your report, and I'll
9 refer specifically to the March 25th
10 report. If we can turn to Page 75.

11 A. Yes.

12 Q. Page 75 includes Table 32.
13 And this table, if you -- if you look at
14 certain entries, there are N/As and there
15 are zeros.

16 A. Yes.

17 Q. What does an N/A represent?

18 A. Well, in general it would be
19 nonapplicable as opposed to nonavailable,
20 or not applicable as opposed to not
21 available.

22 Q. So it means --

23 A. It's just what we were
24 referring to earlier as -- as the cage

1 vault rule. I've just heard that term
2 used generally.

3 And I think if you look at
4 that footnote that is earlier here that
5 cites to a two-page document, I don't
6 think oxymorphone is one of the drugs in
7 that list, and that's why the column says
8 N/A. We could check that, but that's my
9 recollection.

10 The other places where it's
11 N/A as opposed to zero, I just have to
12 check. I'm not certain.

13 Q. Well, as a general rule, and
14 I -- and I didn't mean to -- to confuse
15 you or make you hone in on the fact that
16 Table 32 is about maximum daily dosage
17 unit threshold by transaction.

18 Just generally in your
19 tables, what does N/A mean?

20 A. Not applicable.

21 Q. And what does a zero mean?

22 A. Well, that we ran the
23 methodology and it didn't flag any
24 orders.

1 Q. So in your mind what's the
2 difference between an N/A and a zero?

3 A. Well, this is actually a
4 really good illustration of that. Maybe
5 at least my thinking about how those
6 terms might be used.

7 So if we look at that source
8 document that's cited in the footnote on
9 Page 72, it gives daily limits for
10 different drugs. And it does not, my
11 recollection, give a daily limit for
12 oxymorphone. It does give a limit for
13 the other drugs. And so if a distributor
14 doesn't ship a drug, then there might be
15 an N/A -- a drug for which there is a
16 daily limit in that source document.
17 There might be an N/A if they do ship
18 that drug, but never does that drug
19 exceed the daily limit, then there would
20 be a zero. That's the way I would
21 interpret those two.

22 I might -- I might go back
23 and check to see if there's some
24 situation where we wrote N/A when a zero

1 would be appropriate or where we wrote a
2 zero when an N/A would be appropriate.

3 But looking at this example
4 you've pointed me to, that would be the
5 interpretation that I would take from it.

6 Q. Now, Dr. McCann, have you
7 ever heard the term "diversion" used in
8 connection with prescription opioids?

9 A. Yes.

10 Q. What does diversion mean to
11 you?

12 A. I only have the very vaguest
13 of kind of layman's understanding of that
14 term. I don't -- I don't have an
15 understanding that would be helpful here,
16 I don't think. I'm happy to tell you
17 what it is, but I'm not sure that it's
18 helpful.

19 Q. Yeah, please.

20 A. Sure. So I would just say
21 it sounds like it's related to diverted
22 and that diversion means that some drugs,
23 some prescription drugs were diverted
24 from their intended use, or from their

1 legitimate intended uses to illicit
2 activities.

3 Q. Do you agree that diversion
4 is a crime?

5 A. I have no -- no opinion --

6 MR. MOUGEY: Objection.

7 Outside the scope.

8 THE WITNESS: -- one way or
9 the other.

10 BY MR. EPPICH:

11 Q. Are you planning to offer
12 any opinions about whether or not any of
13 the defendants diverted prescription
14 opioids in this litigation?

15 A. No.

16 Q. I'd like to turn back to
17 Page 56 of your report. Page 56 is the
18 start of Section 9, transaction analysis,
19 you'll recall.

20 I'd like to return to the --
21 the five methodologies that you implement
22 to identify what you call flagged orders.
23 Okay?

24 A. Yes.

1 Q. You testified earlier that
2 the plaintiffs' counsel provided these
3 five methodologies for identifying
4 flagged transactions to you, correct?

5 A. Yes.

6 Q. You didn't come up with the
7 five methodologies yourself?

8 A. No.

9 Q. You have no opinion of -- on
10 whether any of the five methodologies is
11 appropriate for evaluating whether or
12 not -- or, excuse me. Let me strike
13 that.

14 You have no opinion on
15 whether any of the five methodologies are
16 appropriate for identifying what you call
17 flagged transactions, correct?

18 A. Correct.

19 Q. There may be other
20 appropriate methodologies for -- for --
21 let me strike that.

22 You'd agree there may be
23 other appropriate methodologies for
24 flagging suspicious orders, correct?

1 A. Yes.

2 Q. But you have no opinion
3 about the other methods of flagging
4 suspicious orders, correct?

5 A. Or even that they exist. I
6 just allow, in your previous question,
7 that they may exist. I don't have an
8 opinion one way or another on -- on any
9 of the subject matter material.

10 Q. You used algorithms to
11 identify the first flagged transactions
12 in these methodologies?

13 A. Yes.

14 Q. And then you flagged every
15 transaction after that, correct?

16 A. Correct.

17 Q. That was according to
18 plaintiff -- plaintiffs' counsel's
19 instruction, correct?

20 A. Correct.

21 Q. And you did that for all
22 five methodologies?

23 A. Correct.

24 Q. You did not use your

1 algorithm in the five methodologies to
2 identify any of the subsequent
3 transactions that you flagged after the
4 first transaction?

5 A. If I understand that
6 question, is the same as the question
7 asked earlier today. The methodologies
8 flagged that first transaction and
9 everything after that gets flagged. So,
10 in some complete description, the
11 methodology does flag those later
12 transactions, because it flags the first
13 one and every one that follows.

14 But the methodology is not
15 reapplied to each transaction anew. I --
16 I guess is the way I would say it.

17 Q. Another way to say that
18 would be there's no computational
19 analysis on any of the subsequent
20 transactions after that first flagged
21 transaction, correct?

22 A. Correct.

23 Q. Who developed your
24 algorithms for each of these five

1 methodologies?

2 A. I'm sorry, what do you mean
3 by developed?

4 Q. Well, you wrote algorithms
5 for each of these five methodologies,
6 correct?

7 A. Correct.

8 Q. Who wrote those algorithms?

9 A. Well, it was a joint effort
10 of -- so at a very high level you can
11 think of the instruction about which
12 algorithms to use and the assumption that
13 once a transaction is flagged, everything
14 on that day and thereafter is flagged.
15 You could think of that as part of
16 developing or writing the algorithm.

17 So plaintiffs' counsel, some
18 discussion of that between me and -- and
19 my staff and plaintiffs' counsel, and
20 then the actual programming of those
21 rules, members of my staff.

22 Q. It's true that none of your
23 methodologies was ever used by a
24 distributor to identify suspicious

1 orders, correct?

2 A. I don't know one way or the
3 other.

4 Q. And are you offering any
5 opinions or do you plan to offer any
6 opinions about whether or not your five
7 methodologies were ever used by a
8 distributor to -- to identify suspicious
9 orders?

10 A. No.

11 Q. Do you have any experience
12 with any of the distributors' suspicious
13 order monitoring programs?

14 A. No.

15 Q. You didn't review any
16 distributor testimony in this case, did
17 you?

18 A. No.

19 Q. You didn't review the
20 suspicious order monitoring programs for
21 any distributor in this case?

22 A. No.

23 Q. You didn't review McKesson's
24 Section 55 of its operations manual?

1 A. Not that I'm aware of. If
2 I -- if I did, it didn't stick with me.

3 Q. You didn't review McKesson's
4 lifestyle drug monitoring program?

5 A. Same answer.

6 Q. You didn't review McKesson's
7 controlled substance monitoring program?

8 A. No. Not that I'm aware of.

9 Q. You didn't review
10 AmerisourceBergen's suspicious order
11 monitoring programs?

12 A. No, not that I'm aware of.

13 Q. You didn't review Cardinal
14 Health's suspicious order monitoring
15 programs?

16 A. No, not that I'm aware of.

17 Q. You have no opinions about
18 McKesson's suspicious order monitoring
19 program?

20 A. Correct.

21 Q. Do you plan to offer any
22 opinions about McKesson's suspicious
23 order monitoring program?

24 A. No.

1 Q. Do you have any opinions
2 about AmerisourceBergen's suspicious
3 order monitoring program?

4 A. No.

5 Q. And do you intend to offer
6 any opinions about AmerisourceBergen's
7 suspicious order monitoring program?

8 A. No.

9 Q. Do you have any opinions
10 about Cardinal Health's suspicious order
11 monitoring program?

12 A. No.

13 Q. Do you intend to offer any
14 opinions about Cardinal Health's
15 suspicious order monitoring program?

16 A. No.

17 Q. Do you have any opinions
18 about any other distributors' suspicious
19 order monitoring programs?

20 A. No.

21 Q. Do you intend to offer any
22 opinions about any other distributors'
23 suspicious order monitoring programs?

24 A. No.

1 Q. Now, we talked -- we've
2 talked about the five methodologies at
3 length today. I just have a few
4 follow-up questions.

5 Which -- which of the
6 methodologies considers legitimate
7 pharmacy growth over time?

8 A. As distinct from illicit or
9 illegitimate pharmacy growth? I'm not
10 sure I -- I follow that. Take
11 "legitimate" out of the question --

12 Q. Fair enough. Let me strike
13 the question, and I'll re-ask the
14 question.

15 Which methodologies consider
16 pharmacy growth over time?

17 A. All five of them, but
18 primarily the first three.

19 Q. How does the maximum monthly
20 trailing six-month threshold consider or
21 account for pharmacy growth over time?

22 A. Well, to the extent that
23 pharmacies receipt of a drug increases
24 over time, it gets flagged under that

1 method. So it considers the growth. And
2 if the pharmacy's shipments increase, at
3 some point the shipments -- a shipment
4 and the shipments thereafter get flagged.

5 Q. Is it your opinion that a
6 flagged order, or what you call a flagged
7 order indicates the growth of the
8 pharmacy?

9 A. Well, by definition it does
10 in this section, right? Because the only
11 way an order gets flagged is if in a
12 month the pharmacy receives more drugs
13 than it received at the maximum in the
14 previous six months. And that's growth,
15 right? That's a higher number in the
16 seventh month than in the previous six
17 months.

18 Q. What are some reasons why a
19 pharmacy may grow over time?

20 MR. MOUGEY: Outside the
21 scope. Objection.

22 THE WITNESS: I don't know.
23 I haven't thought through those
24 issues.

1 BY MR. EPPICH:

2 Q. Now, you say that your
3 methodology flags orders, correct?

4 A. Yes.

5 Q. If the distributors had
6 refused to ship each of your flagged
7 orders, would any legitimate
8 prescriptions have gone unfilled?

9 MR. MOUGEY: Objection.

10 THE WITNESS: I don't know.

11 BY MR. EPPICH:

12 Q. Are you planning to offer
13 any opinions in this case as to whether
14 or not distributors' refusal to ship
15 would result in any legitimate
16 prescriptions having gone unfilled?

17 MR. MOUGEY: Objection.

18 THE WITNESS: Not as I sit
19 here.

20 BY MR. EPPICH:

21 Q. Now, if the distributors had
22 refused to ship each of your flagged
23 orders, would that have prevented the
24 opioid crisis?

1 MR. MOUGEY: Objection.

2 THE WITNESS: I have no
3 idea. No opinion one way or the
4 other.

5 BY MR. EPPICH:

6 Q. And do you plan to offer any
7 opinions about whether or not
8 distributors play a role or played a role
9 in causing or preventing the opioid
10 crisis?

11 MR. MOUGEY: Objection.

12 THE WITNESS: No. As with a
13 lot of this stuff, that's going to
14 be the subject of other experts'
15 reports and testimony.

16 BY MR. EPPICH:

17 Q. Now, you used ARCOS data for
18 your methodologies, correct?

19 MR. MOUGEY: Objection.

20 THE WITNESS: Along with
21 other data. But, yes, I used
22 ARCOS data.

23 BY MR. EPPICH:

24 Q. And you understand that

1 registrants are required to submit ARCOS
2 data to the DEA on a monthly or quarterly
3 basis?

4 MR. MOUGEY: Objection.

5 THE WITNESS: That's my
6 general understanding. I don't
7 have an expert opinion or expert
8 understanding. But in context, as
9 part of the context, I have, when
10 analyzing the data, that's my
11 understanding.

12 BY MR. EPPICH:

13 Q. And based on your review of
14 this ARCOS data, would you agree that
15 registrants have submitted accurate data
16 to DEA?

17 A. I would say it a little bit
18 differently, but something very close to
19 that.

20 Q. How would you say it?

21 A. Well, what I see is not
22 necessarily exactly what registrants
23 submit to the DEA.

24 What I see is what the DEA

1 produced to me. And so I want to make
2 that slight qualification.

3 And an example of that would
4 be, there's 20 or 21 days where I think
5 for Ohio there are no Cardinal Health
6 transactions in ARCOS. I may have the
7 jurisdictions slightly off. But there's
8 a period there where there are a bunch of
9 Cardinal Health transactions that were
10 produced in discovery in this case, to
11 pharmacies over a 20 or 21-day period
12 that is not in the ARCOS data produced to
13 me by the DEA.

14 And so I can't say that that
15 data was produced by Cardinal Health to
16 the DEA and they just didn't produce it
17 to me, or in the alternative, that
18 Cardinal Health didn't produce those
19 21 days of transactions to the DEA.

20 Setting aside an issue like
21 that, what I would say is that the data
22 that I received from the DEA as ARCOS
23 data is consistent after fixing a few
24 things, largely consistent with the data

1 that the defendants produced in this case
2 in discovery. It's a little bit
3 different than what you said, but it's
4 close.

5 Q. So to restate, you'd agree
6 that the ARCOS data that the DEA provided
7 to you was accurate?

8 A. That's certainly how I
9 shorthanded in a sentence or two a couple
10 of times in the report. But if you read
11 the entire report what I'm saying is that
12 the ARCOS data that I received after
13 making some corrections on allowing for
14 some periods where they don't match
15 perfectly, match the defendant
16 transaction data produced in discovery
17 quite closely.

18 Q. You're aware that only the
19 DEA has access to ARCOS data?

20 A. I don't know if that's true.
21 I don't know one way or another.

22 Q. Are you aware that
23 distributors could not see the ARCOS data
24 of any other distributor?

1 A. I don't know if that's true.
2 I don't know one way or the other.

3 Q. Do you plan on offering any
4 opinions about whether or not a
5 distributor has access to ARCOS data?

6 MR. MOUGEY: Objection.

7 THE WITNESS: Not other than
8 to their own data, I don't have an
9 opinion one way or the other.

10 BY MR. EPPICH:

11 Q. Do your methodologies comply
12 with the Controlled Substance Act and the
13 applicable DEA regulations?

14 A. I'm not familiar with the
15 details of the Controlled Substance Act
16 or the applicable regulations. But there
17 seems to be a disconnect between whatever
18 is in those documents and what I've
19 described here as my methodologies.

20 Q. What is that disconnect?

21 A. Well, by a disconnect, I
22 mean in layman's terms they are kind of
23 apples and oranges. I've described in
24 the reports the methodologies that I

1 applied and the results of applying those
2 methodologies to the ARCOS data for
3 Cuyahoga and Summit, supplemented with
4 the defendants' transaction data
5 produced.

6 I'm not sure what -- I don't
7 understand the applicability of the
8 Controlled Substances Act or the
9 regulations they're under to the
10 calculations that I've done. So I don't
11 know if it's consistent or not
12 consistent. I don't see the connection
13 between them.

14 Q. And do you intend to offer
15 any opinions in this case about whether
16 or not your methodologies comply with the
17 Controlled Substances Act or its
18 regulations?

19 MR. MOUGEY: Objection.

20 THE WITNESS: Not as I sit
21 here. I don't see the connection,
22 as I just said.

23 BY MR. EPPICH:

24 Q. If we can look at Page 56 of

1 your report, sir, at Paragraph 132. This
2 has been the subject of some questioning
3 earlier today.

4 And I'm referring to the
5 assumption that is stated in
6 Paragraph 132, where you write, "In this
7 approach" -- and I think we've
8 established that Paragraph 132 is
9 applying to all five methodologies.

10 "In" -- "in this approach
11 and the others implemented below, I have
12 been asked by counsel to assume that the
13 distributor did not effectively
14 investigate the flagged transactions, and
15 so every subsequent transaction of that
16 drug code is also flagged because the
17 distributor had an unfulfilled obligation
18 to detect and investigate the first
19 flagged transaction."

20 Did I read that correctly?

21 A. Yes.

22 Q. What did you do to evaluate
23 the validity of this assumption?

24 A. Nothing. It was just an

1 assumption that I was asked to make. And
2 I implemented it.

3 There -- if the evidence
4 were to be developed in some other way,
5 the methodology could be applied to some
6 variant on this assumption. But this was
7 the assumption that I was asked to make
8 based on -- on what I understand other
9 witnesses may testify about. And
10 ultimately whatever the court decides on
11 this issue could be -- could inform the
12 application of this tool to create a
13 different set of flagged transactions
14 from the same underlying data.

15 Q. So you didn't review any
16 documents or deposition testimony or
17 any -- any other evidence in this case
18 to -- to validate the assumption?

19 A. Correct.

20 Q. You have no knowledge about
21 whether distributors had an unfulfilled
22 obligation to detect and investigate the
23 first flagged transaction?

24 MR. MOUGEY: Objection.

1 THE WITNESS: Right, I
2 said -- as I said, I think that's
3 outside the scope of the analysis
4 that I was asked to do. And I
5 wouldn't have particular subject
6 matter expertise that would be
7 relevant in any case.

8 All I was asked to do was to
9 assume that after a transaction
10 gets flagged, the subsequent
11 transactions are also flagged.

12 BY MR. EPPICH:

13 Q. It's true that you don't
14 even know if distributors have an
15 obligation to detect and investigate the
16 first flagged transaction, correct?

17 MR. MOUGEY: Objection.

18 THE WITNESS: As a result of
19 understanding the context of this
20 litigation, I have sort of a
21 general layman's understanding,
22 but I don't have an expert
23 understanding or an expert opinion
24 on the subject.

1 BY MR. EPPICH:

2 Q. Are you planning to offer
3 any opinions about any distributor
4 obligation to detect and investigate what
5 you call the first flagged transaction?

6 MR. MOUGEY: Objection.

7 THE WITNESS: No. That will
8 be for other witnesses.

9 BY MR. EPPICH:

10 Q. Now, if a distributor did,
11 in fact, detect and investigate the first
12 flagged transaction, your methodology
13 would incorrectly flag every subsequent
14 transaction for that base code and
15 pharmacy, wouldn't it?

16 MR. MOUGEY: Objection.

17 THE WITNESS: I would say it
18 differently.

19 I would say that I was asked
20 to assume that there was not
21 effective due diligence, or
22 rather, that when one of these
23 algorithms flags a transaction to
24 a pharmacy, the subsequent

1 transactions should also be
2 flagged.

3 If the evidence were to be
4 developed that during some time
5 periods that's a reasonable
6 assumption and in other time
7 periods it's not, or it's a
8 reasonable assumption for some
9 pharmacies and not others, or for
10 some distributors and not others,
11 or some other variation on this
12 assumption, then those alternative
13 assumptions could be implemented
14 in the algorithm that I've
15 developed here on the data that
16 we've cleaned and processed.

17 I've given you an
18 illustration of one set of
19 assumptions, one fact pattern if
20 you will. If -- if an alternative
21 fact pattern is developed and a
22 jury is convinced of that
23 alternative fact pattern, then the
24 analysis would be different. It

1 would be the same general
2 methodology, but the results would
3 be different because it would --
4 it would be based on a different
5 set of assumptions.

6 BY MR. EPPICH:

7 Q. So under this different set
8 of assumptions where a distributor
9 detects and investigates the first
10 flagged order, you'd agree that the
11 results would be different and the
12 methodology that we see in this report
13 would be incorrectly flagging every
14 subsequent transaction?

15 MR. MOUGEY: Objection.

16 THE WITNESS: No. I would
17 not say it that way. I apologize
18 for being wordy.

19 But the way I would say it
20 is that -- that if the -- take a
21 situation where there's a
22 particular order that is the first
23 flagged order in this application
24 for a particular distributor and

1 pharmacy. And the evidence was
2 developed that that order was
3 investigated, cleared and shipped,
4 then the methodology would just be
5 applied allowing for that
6 transaction. And -- so it's the
7 same methodology.

8 I'm not -- I'm not seeing --
9 maybe I'm -- I apologize. I may
10 not be seeing the distinction
11 between this question and the
12 answer I gave to the prior
13 question.

14 BY MR. EPPICH:

15 Q. And I apologize if I'm
16 confusing you. And let me try and
17 simplify the question.

18 If a distributor were to
19 detect and investigate the first flagged
20 order and your methodology applied that
21 assumption, you'd agree with me that the
22 results of the flagged subsequent
23 transactions would be different than what
24 we see in the charts and graphs of your

1 report?

2 A. I apologize, yes. If the
3 facts were to be developed to the jury's
4 satisfaction, to the court's
5 satisfaction, different from the assumed
6 facts in this illustration, then the
7 algorithms would have to be run under
8 that new set of assumed facts and it
9 would generate different results.

10 Q. Now, I believe you testified
11 earlier today that you ran some of the
12 data without the plaintiffs' assumption.
13 Did I understand that testimony
14 correctly?

15 A. Yes.

16 Q. That was in preparing for
17 this report?

18 A. No. That was earlier than
19 that.

20 Q. But that -- that analysis is
21 not found in your report, correct?

22 A. Correct.

23 Q. Now, when -- when you did
24 that, what were the results that you saw?

1 A. Well, as I said earlier, you
2 end up with fewer transactions being
3 flagged for sort of obvious reasons.

4 Q. So you'd agree that your
5 reliance on plaintiffs' counsel
6 assumption to flag every subsequent
7 transaction increased the number of
8 flagged transactions?

9 MR. MOUGEY: Objection.

10 Asked and answered.

11 Are we -- are we going to --
12 are we going to go through the
13 same questions we did this
14 morning? I mean, that's -- that's
15 the third time he's answered that
16 question.

17 MR. EPPICH: I'm doing my
18 best but I --

19 MR. MOUGEY: I hear you, but
20 when we -- I'm --

21 MR. EPPICH: Keep your
22 objection as to form.

23 MR. MOUGEY: I mean, the
24 fact that we are allowing

1 different counsel to ask questions
2 doesn't mean we're going to sit
3 and ask the same questions. I
4 mean, some of these questions are
5 almost verbatim of what we went
6 through this morning fishing for a
7 different answer.

8 MR. EPPICH: I disagree with
9 that, sir.

10 MR. MOUGEY: I mean, I can
11 almost cut and paste these and put
12 them on top.

13 And I think if y'all haven't
14 coordinated who is going to take
15 what topics, I think we need to
16 make sure we do that for tomorrow.
17 Because these questions are almost
18 verbatim to what we went through
19 this morning. I could answer
20 them.

21 BY MR. EPPICH:

22 Q. Sir, you may answer the
23 question.

24 A. If you assume 100 percent

1 due diligence, you don't flag very many
2 orders. If you assume zero due
3 diligence, you flag more orders. And
4 this model is flexible enough to
5 incorporate different sets of facts
6 developed about the extent of due
7 diligence between zero and 100 percent.

8 Q. If we could turn to
9 Paragraph 131 of your report which is on
10 Page 56. This is the first paragraph
11 under the maximum monthly trailing
12 six-month threshold.

13 A. Yes.

14 Q. In Paragraph 131 of your
15 report, you provide an example. You say,
16 "If the number of dosage units containing
17 hydrocodone shipped from a distributor to
18 a pharmacy in February, March, April,
19 May, June, and July were 5,000, 10,000,
20 7,000, 8,000, 9,000, and 9,500
21 respectively, a requested transaction in
22 August would be flagged if it would cause
23 the number of dosage units containing
24 hydrocodone the distributor shipped to

1 the pharmacy to exceed 10,000."

2 Did I read that correctly?

3 A. Yes.

4 Q. So if the pharmacy ordered
5 10,500 in August of 1997, that order
6 would be flagged under your six-month
7 threshold analysis, correct?

8 MR. MOUGEY: Objection.

9 Asked and answered.

10 THE WITNESS: I'm sorry.

11 Which order?

12 BY MR. EPPICH:

13 Q. If the pharmacy were to
14 order 10,500 in August of, say, 1997,
15 that order would be flagged under your
16 six-month threshold analysis, correct?

17 A. I think there's some
18 confusion in that question. Maybe my
19 sentence there is not clear. I could
20 explain if you'd like.

21 Q. Well, I'm just trying to
22 figure out if the pharmacy ordered 10,500
23 in August, wouldn't that order be
24 flagged?

1 A. No. I'm sorry. You're not
2 saying it correctly. Can I explain?

3 Q. Yes, please.

4 A. So it's not an order of
5 10,500. It's probably a weekly order of
6 2,000, 3,000, 2,000, 4,000, 1,500. And
7 it's the last order that puts you above
8 10,000. And it's that order, it's the
9 order that puts you above 10,000. So you
10 keep saying the order of 10,500. It's
11 not an order of 10,500 typically.

12 And it's that order or the
13 orders that day in that drug code and the
14 subsequent orders in that drug code that
15 get flagged.

16 Q. I appreciate that
17 clarification.

18 So if the pharmacy, if their
19 total orders for the month of August 1997
20 were 10,500 by the end of the month, the
21 last order that they had would be flagged
22 under your six-month threshold analysis,
23 correct?

24 A. In my example. But it may

1 not be the last order that triggers the
2 flag, right. It could be the
3 second-to-last order. But whatever the
4 orders are on that day in that drug code
5 and the rest of the orders that month,
6 and the orders that follow, are what get
7 flagged.

8 Q. That's right. And so every
9 order of the drug thereafter would be
10 flagged for this particular pharmacy,
11 correct?

12 A. Correct.

13 Q. So orders starting in
14 September '97 or maybe even later in
15 August 1997 until all the way to the end,
16 let's say, 2018, those would all be
17 flagged under your six-month threshold
18 analysis, correct?

19 A. Correct.

20 Q. Even if no subsequent
21 monthly orders totaled 10,000, correct?

22 A. Correct.

23 Q. Now, let's say the
24 pharmacy -- let's say their orders for

1 the month of August 1997 exceeded 10,000
2 because there was an emergency, let's say
3 a natural disaster. That last order in
4 August would be flagged and every
5 subsequent order would be flagged under
6 your six-month threshold, correct?

7 MR. MOUGEY: Objection.

8 THE WITNESS: I'm sorry.

9 I'm not sure that I understood
10 that question. Could you ask it
11 again, please.

12 BY MR. EPPICH:

13 Q. Of course. If a pharmacy --
14 if an order in August of 1997 -- let me
15 strike that.

16 If a pharmacy ordered a
17 total number of orders that exceeded
18 10,000 in August of 1997 because there
19 was an emergency, let's say a natural
20 disaster, that order that exceeded 10,000
21 would be flagged under your six-month
22 threshold analysis, correct?

23 A. If the order itself doesn't
24 exceed 10,000, but the order causes the

1 cumulative orders so far that month to
2 exceed \$10,000 -- 10,000 dosage units,
3 that's correct. Then that order -- it
4 might be just 200 dosage units, you know,
5 taking you from 9,900 to 10,100. So that
6 200-dosage-unit order and all subsequent
7 orders get flagged.

8 Q. Even though that store
9 ordered in excess of the limit of its
10 previous six-month ordering because of an
11 emergency?

12 A. Correct, the application of
13 the algorithm to the data doesn't take
14 into account that or other hypotheticals
15 that you could develop that would go
16 either -- either way.

17 Q. Assuming that the store
18 ordered that same drug every month
19 between, say, September 1997 and the end
20 of 2018, your six-month threshold
21 analysis would flag all of those orders
22 as suspicious just because of that one
23 month in 1997, correct?

24 A. I don't think I used the

1 word "suspicious" anywhere in this
2 report. I just said that the order is
3 flagged.

4 And that's correct, the
5 algorithm is flagging the transactions
6 after that example transaction in your
7 hypothetical until the end of the data.
8 It's as equally likely to go the other
9 way as the way you are suggesting. But
10 the algorithm is agnostic about that.
11 It's just applying the rule to the data.

12 Q. I don't understand what
13 you -- what you're saying. It's equally
14 as likely to go the other way? Are you
15 saying that once an order is flagged, all
16 subsequent orders are not flagged?

17 A. No, no. Not at all. In
18 your example, the natural disaster occurs
19 in the seventh month. If it occurs in
20 the fifth month, then you've got a spike
21 in the -- temporary spike in the
22 shipments in the fifth month, and that
23 raises the threshold that would be
24 applied to judge all of the subsequent

1 months.

2 So because of the natural
3 disaster, a bunch of orders that
4 otherwise would be flagged are not
5 getting flagged in your example because
6 of the natural disaster occurring in the
7 seventh month instead of the fifth month.
8 You're suggesting that a bunch of orders
9 get flagged that wouldn't otherwise get
10 flagged.

11 What I'm saying is, in your
12 hypothetical it could go the other way.
13 It could go exactly the opposite. And
14 I'm not -- I'm not expressing an opinion
15 other than the two that I've tried --
16 high-level opinions that I've tried to
17 offer, which is that you can clean up a
18 dataset and make it useful. And you can
19 apply algorithms, some of which I've
20 illustrated here, to that cleaned-up
21 data.

22 Q. But in your maximum monthly
23 trailing six-month threshold analysis, an
24 order can be flagged and the order was

1 placed because of a natural emergency, or
2 perhaps it was diversion, or perhaps it
3 was because of a new doctor moving in
4 down the street. Your methodology
5 doesn't account for any of those changes;
6 isn't that correct?

7 A. I'd say it a little bit
8 differently, but yes.

9 Q. Now, we talked earlier about
10 your twice trailing 12-month average
11 pharmacy dosage units methodology and
12 your three times 12-month threshold
13 analysis. Do you remember that
14 discussion?

15 A. Yes.

16 Q. Now, your twice 12-month
17 threshold analysis and your three times
18 12-month threshold analysis are the same,
19 just with a different multiplier; is that
20 correct?

21 A. Yes.

22 Q. The only difference is the
23 amount of the multiplier?

24 A. That's all I could think of

1 as I sit here, yes.

2 Q. On Page 68 you introduce the
3 maximum 8,000 dosage unit monthly
4 methodology?

5 A. Yes.

6 Q. Are you aware of any
7 distributor that has ever used your 8,000
8 dosage units analysis to identify
9 suspicious orders?

10 MR. MOUGEY: Objection.

11 THE WITNESS: That's more
12 than I'm aware of. I have heard
13 the 8,000 -- maximum 8,000 monthly
14 units sometimes referred to in
15 shorthand as the McKesson rule.
16 But I don't know that that is a
17 rule that was actually applied if
18 by McKesson or anybody else.

19 I hear that rule or that
20 approach being described as the
21 McKesson 8,000 rule. I don't know
22 the origin of that
23 characterization.

24 BY MR. EPPICH:

1 Q. Do you have any
2 understanding about -- let me strike
3 that.

4 As you sit here today, you
5 have no knowledge about the origin of the
6 McKesson -- of -- let me strike that.

7 And sitting here today, you
8 have no opinion that this methodology was
9 used or not used by McKesson?

10 A. Correct.

11 Q. Do you intend to offer any
12 opinions in this case as to whether or
13 not McKesson did or did not use this
14 methodology in practice?

15 A. No.

16 Q. Dr. McCann, you are not a
17 pharmacist, are you?

18 A. No, I'm not.

19 Q. You have no training in
20 pharmacy science?

21 MR. MOUGEY: We'll stipulate
22 he's not a pharmacist. He's not a
23 doctor --

24 MR. EPPICH: Sir, I'm not

1 asking for your stipulation.

2 MR. MOUGEY: Well, we
3 don't -- we went through this. Do
4 you not remember this this
5 morning?

6 MR. EPPICH: I would just
7 like the -- the witness to answer
8 the question.

9 MR. MOUGEY: Do you remember
10 the answers to the questions this
11 morning about whether or not he's
12 a pharmacist?

13 MR. EPPICH: I think you
14 spend more time arguing for an
15 objection --

16 MR. MOUGEY: I promise you,
17 I haven't.

18 MR. EPPICH: -- than -- than
19 he would just answering the
20 question.

21 MR. MOUGEY: You really
22 don't remember this this morning,
23 are you a pharmacist, are you a
24 doctor? You don't remember that?

1 MR. EPPICH: Are you -- are
2 you instructing him not to answer
3 these questions?

4 MR. MOUGEY: I mean I'm
5 really not, but can we please be,
6 I mean, just a little careful
7 about, I mean, coordinating this
8 to some extent?

9 Can this --

10 MR. EPPICH: Let me start
11 this whole -- let me start this
12 again, sir.

13 MR. MOUGEY: Yeah, I mean,
14 you do what you feel is necessary.

15 Are you a pharmacist? I
16 mean, come on. I mean, really.

17 MR. EPPICH: I'm
18 just sitting -- I'm waiting for
19 you to finish.

20 MR. MOUGEY: Well, good.
21 I'm waiting for you to come up
22 with a question that we haven't
23 done yet.

24 BY MR. EPPICH:

1 Q. Dr. McCann, you are aware
2 that pharmacists fill legitimate
3 prescriptions filled by legitimate
4 medical professionals?

5 A. Yes.

6 Q. And you are aware that
7 pharmacists stock their pharmacies by
8 placing orders with distributors?

9 A. Yes.

10 Q. I'd like to talk about your
11 excessive shipments analysis on Page 82
12 of your report.

13 You testified earlier that
14 you are not aware the DEA established
15 quotas for controlled substances every
16 year; is that correct?

17 A. Correct.

18 Q. Do you know that the DEA
19 sets these annual production quotas for
20 controlled substances based on the
21 estimated medical, scientific research
22 and industrial needs of the United
23 States?

24 A. No.

1 MR. MOUGEY: Objection.

2 Asked and answered.

3 BY MR. EPPICH:

4 Q. You didn't consider DEA's
5 quotas in setting your baselines that
6 are -- are found in your excessive
7 shipments methodology?

8 MR. MOUGEY: Objection.

9 Asked and answered.

10 THE WITNESS: Correct.

11 BY MR. EPPICH:

12 Q. Now, you know that the quota
13 levels for opioids have consistently
14 increased since 1997, don't you?

15 A. I just told you I'm not
16 aware of the quotas and I didn't include
17 them in my analysis. So I don't know how
18 to answer that question.

19 Q. Well, you'd agree that a
20 baseline rooted in sound scientific
21 principles would include something as
22 significant as the DEA consistently
23 increasing the quota?

24 MR. MOUGEY: Objection.

1 THE WITNESS: It may or it
2 may not. I'm not a subject matter
3 expert.

4 BY MR. EPPICH:

5 Q. It's not something you
6 considered?

7 A. That's correct. I said that
8 a couple minutes ago.

9 Q. And do you plan to offer any
10 opinions or revise your excessive
11 shipments analysis to include or account
12 for the quotas set by the DEA?

13 A. Not beyond the extent to
14 which those quotas are already impacting
15 the 2018 levels, no.

16 Q. But sitting here today, you
17 don't know whether or not the baseline
18 you have for 2018 is impacted by quota?

19 A. I haven't thought through
20 that issue. But as you've suggested it
21 to me, I would just have to think through
22 it some more. But I'm not offering in
23 any case any subject matter opinion.

24 I'm just saying that --

1 well, as I explained earlier, that I have
2 interpolated between the 1997 and the
3 2018 levels for the reasons I did. For
4 no other reasons. And that includes for
5 no other consideration beyond the actual
6 levels of 2018. However, they may or may
7 not be impacted by the quotas you're
8 describing.

9 Q. You don't know as you sit
10 here today, correct?

11 A. I don't know anything about
12 the quotas, as I said now two or three
13 times. They did not impact any of my
14 calculations including in this section.

15 Q. Your report classifies
16 shipments of prescription opioids as
17 excessive, correct?

18 A. Relative to the benchmarks
19 in Section 10, that's correct.

20 Q. Which of these shipments
21 should distributors have refused to ship
22 to their pharmacy customers?

23 A. In Section 10?

24 Q. Yes, sir.

1 A. Section 10 doesn't deal with
2 individual shipments from distributors to
3 pharmacies. It's at a higher, more macro
4 level, describing the shipments into
5 Ohio, and into Cuyahoga and Summit, and
6 how those exceed the two example
7 baselines that I created.

8 Q. Yes. And earlier you -- you
9 explained what the -- what you meant by
10 excessive shipments. And so I'm asking
11 you, of these excessive shipments, which
12 of them should distributors have not
13 shipped to pharmacies?

14 A. I don't have an opinion one
15 way or another beyond what's expressed in
16 Section 10 on that topic.

17 Q. Were any of what you
18 called -- call excessive shipments
19 diverted?

20 A. I don't know.

21 Q. You can't point to any of
22 your excessive shipments that were
23 diverted?

24 MR. MOUGEY: Objection.

1 Outside the scope.

2 THE WITNESS: And it's just
3 mischaracterizing what I did in
4 Section 10. I'm not identifying
5 individual transactions in
6 Section 10.

7 I'm just saying at a macro
8 level, the amount of MME per
9 capita shipped into Cuyahoga and
10 Summit went up by a factor of
11 eight or ten, and then came back
12 down by nearly 50 percent, and
13 I've explained how that dramatic
14 increase exceeds some gradual
15 growth from the earlier levels to
16 the later levels.

17 BY MR. EPPICH:

18 Q. Do you plan to offer any
19 opinions in this case as to whether or
20 not the excessive shipments that are
21 represented in your report in Section 10
22 were diverted?

23 A. No.

24 Q. Your 1997 baseline, you

1 recall testifying about that earlier
2 today?

3 A. Yes.

4 Q. Your 1997 baseline assumes
5 all prescriptions were necessary?

6 A. Yes.

7 Q. Your 1997 baseline does not
8 consider any additional factors beyond
9 the number of prescriptions that year,
10 correct?

11 A. There's a whole lot of stuff
12 it doesn't consider. Like car sales, I
13 don't know what it is that you're
14 referring to. I don't have any idea what
15 you might be referring to.

16 It doesn't include anything
17 except the MME per capita shipped in
18 1997.

19 I apologize. I don't mean
20 to get snippy. I'm getting hungry. I
21 need a Snickers bar.

22 Q. Would you like to take a
23 break, sir?

24 A. Whenever is a convenient

1 time.

2 MR. EPPICH: We can take a
3 break.

4 Let's go off the record.

5 THE VIDEOGRAPHER: Off the
6 record at 5:06 p.m.

7 (Short break.)

8 THE VIDEOGRAPHER: We are
9 back on the record at 5:17 p.m.

10 BY MR. EPPICH:

11 Q. Dr. McCann, I'm handing you
12 what we marked as McCann Exhibit 8.

13 (Document marked for
14 identification as Exhibit
15 McCann-8.)

16 THE WITNESS: Thank you.

17 BY MR. EPPICH:

18 Q. Dr. McCann, Exhibit 8 is
19 Appendix 6 from your report. Do you
20 recognize it?

21 A. Yes.

22 Q. Now, what is Appendix 6?

23 A. I forget where in the report
24 we reference it, or I reference it. But

1 it was -- it was my attempt to aggregate
2 up the different DEA numbers for the same
3 defendant.

4 Q. So in the left column, you
5 have the company family; is that correct?

6 A. Yes.

7 Q. And in the middle column,
8 you have the various entity names that
9 are associated with that family?

10 A. I would say it a little bit
11 differently. In the ARCOS data I think
12 what we see is the middle and the right
13 column. And for purposes of creating our
14 report, sometimes we want to create the
15 report by defendant. And so you would
16 have multiple DEA numbers with exactly
17 the same name in the ARCOS data and then
18 other times with slight variations on the
19 name. So we just tried to aggregate
20 those up to the best we could to a common
21 name for each defendant.

22 Q. So defendants' names are in
23 the left column. Is that what you're
24 saying?

1 A. Correct.

2 Q. Okay. And the entities that
3 are associated with that defendant are in
4 the middle column, correct?

5 A. I'm sorry, as I would say it
6 those are the names that we observe in
7 the ARCOS data.

8 Q. Okay. I don't mean to
9 confuse you. I'm sorry about that.
10 But let's -- let me have you
11 turn to Page 6. It's Page 141 of your
12 report.

13 A. Oh. Yes.

14 Q. Now, on Page 141 the last
15 entry for the McKesson Corporation, is
16 seller name Watson Pharma Incorporated.

17 Do you see that?

18 A. Yes.

19 Q. Are you aware that Watson
20 Pharma Incorporated is not a McKesson
21 entity?

22 A. In general, I know of a
23 Watson entity that is distinct from
24 McKesson. I'm not sure, as I sit here

1 why -- why this particular seller name
2 and DEA number is associated with
3 McKesson. I would have to check on that.

4 Q. But if Watson Pharma --
5 or -- excuse me. If Watson Pharma Inc.
6 is not a McKesson entity, you would agree
7 with me that including Watson in the
8 McKesson family would be a mistake?

9 A. Unless there was some other
10 reason why it should be included. And
11 there may or may not be. I just don't
12 know as I sit here.

13 Q. How did you determine which
14 DEA numbers coincided with which seller's
15 family?

16 A. Well the ARCOS data gives
17 the DEA number, the seller DEA number and
18 the seller name. And so for many of them
19 it was obvious there was a direct
20 correspondence between for instance the
21 30 or 50 or 75 Cardinal Health DEA
22 numbers and Cardinal Health, and the same
23 thing for some of these others.

24 I'm thinking that to the

1 extent that there -- that there would be
2 adjustments to our list, it would be to
3 include more DEA numbers with the seller
4 family than what we've included.

5 What we've mostly done is
6 just include the obvious ones, like the
7 McKesson DEA numbers, with the exception
8 of the last two on this list for
9 McKesson. Prescription Pak, Division of
10 McKesson Corp., well, that seems obvious.

11 Watson Pharma, I just will
12 have to check to see why that particular
13 seller DEA number we've associated with
14 McKesson.

15 Q. Did you perform this
16 correlation between the seller family and
17 the seller names yourself or did someone
18 on your staff?

19 A. Someone on my staff.

20 Q. If we could turn to Page 38
21 of Exhibit 2 or 3, your report, to Page
22 38. I'm looking at Paragraph Number 93.

23 A. Yes.

24 Q. The first sentence says,

1 "The McKesson data is missing all
2 transactions involving 47 NDCs, 14
3 million MME."

4 A. Yes.

5 Q. Did I read that correctly?

6 A. Yes.

7 Q. It's true that nowhere in
8 your report do you state for which NDCs
9 McKesson data is missing, correct?

10 A. Well, that's not true, or
11 not completely true, anyway. Footnote 33
12 identifies three of the NDC codes that
13 account for 58 percent of that missing
14 MME. It doesn't -- it doesn't list the
15 other 44 NDCs that cover the remaining
16 42 percent. But it lists three of -- the
17 three biggest ones.

18 Q. And sitting here today, do
19 you know what NDCs you allege are missing
20 from the McKesson data?

21 A. Not as I sit here, other
22 than the three that are itemized in the
23 footnote.

24 Q. If we could turn to your

1 second report, which is your supplemental
2 report dated April 3rd. And if you
3 wouldn't mind turning to Page 8 of that
4 report at Paragraph 20.

5 Paragraph 20 reads, "I was
6 provided the two pages of figures
7 attached hereto as Appendix D, which
8 purport to illustrate the total dosage
9 units of opioids shipped by McKesson to,
10 A, the United States; and, B, to Ohio."

11 Did I read that correctly?

12 A. Yes.

13 (Document marked for
14 identification as Exhibit
15 McCann-9.)

16 BY MR. EPPICH:

17 Q. Let me introduce as
18 Exhibit 9, Appendix D of your report.

19 A. Thank you.

20 Q. If we turn to page --
21 Appendix D is Page 85 of your second
22 report.

23 This contains additional
24 McKesson figures and tables, correct?

1 A. Correct.

2 Q. What are these figures and
3 tables?

4 A. My understanding is that
5 these are figures and tables that were
6 used in depositions as demonstratives and
7 we were asked to verify that this was our
8 work product. I think that was the
9 purpose of this supplemental.

10 Q. Is this your work product,
11 Dr. McCann?

12 A. Yes.

13 Q. All of the tables and
14 figures in Appendix D?

15 A. Yes.

16 Q. Did you produce the
17 underlying data files or Excel files that
18 are -- that are associated with each of
19 these charts and tables?

20 A. I think so. That was our
21 intention.

22 Q. Do you plan to offer any
23 opinions about these charts or tables
24 that you have in Appendix D?

1 A. Not other than to perhaps
2 report what they illustrate.

3 Q. Sitting here today, no one
4 has asked you to offer any opinions about
5 the methodologies behind these tables and
6 figures, or what they mean?

7 A. Correct.

8 MR. EPPICH: Let me pass you
9 to my colleague. We'll go off the
10 record.

11 THE VIDEOGRAPHER: Off the
12 record at 5:28 p.m.

13 (Short break.)

14 THE VIDEOGRAPHER: We are
15 back on the record at 5:31 p.m.

16 - - -

17 EXAMINATION

18 - - -

19 BY MR. BOEHM:

20 Q. Welcome back after a short
21 break.

22 A. Thank you.

23 Q. Mr. McCann, my name is Paul
24 Boehm. We introduced ourselves very

1 briefly before we went back on the
2 record. Thank you for being here today
3 and for your time.

4 A. You're welcome. Thank you.

5 Q. Before you were asked to do
6 so by the lawyers in this litigation, did
7 you have any experience reviewing or
8 analyzing distributor transactional data?

9 A. No.

10 Q. And when I use the term
11 "distributor transactional data," what do
12 you understand that to mean?

13 A. I'm sorry. I understood you
14 to mean specifically opioid or controlled
15 substance transaction data. We've done a
16 tremendous amount of work on very large
17 datasets, some of them larger than this
18 ARCOS dataset. Some of which you could
19 think of as involving distributors. But
20 not pharmaceutical drugs and not
21 distributors of pharmaceutical drugs.

22 Q. Okay. So have -- have you
23 ever had experience outside of this
24 litigation reviewing or analyzing

1 distributor transactional data, including
2 sales data, purchase data, or ordering
3 data?

4 A. Certainly not with respect
5 to pharmaceutical products that I can
6 remember.

7 Q. How about outside of
8 pharmaceutical products, as far as you
9 can remember?

10 A. Well, earlier in my career,
11 I did a fair bit of antitrust consulting.
12 And there shipments of drugs -- I'm
13 sorry, drugs, other products,
14 agricultural products or automobiles or
15 other products, and their pricing would
16 be relevant to some of that analysis, but
17 it's some time ago and I don't recall the
18 details. And although I -- I was
19 involved in some antitrust-related work
20 in the pharmaceutical industry, it's
21 not -- it wasn't analyzing data of the
22 type that I've analyzed in this case.

23 Q. Okay. Then is it fair to
24 say that you have not, outside of this

1 experience in this particular litigation,
2 ever had the opportunity to analyze or
3 review transactional data from wholesale
4 drug distributors?

5 A. Yes. At least not that I
6 recall.

7 Q. Do you agree that, of the
8 five approaches that are described in
9 your report in this case, none of them
10 has been standardized or endorsed by the
11 United States Drug Enforcement Agency?

12 A. I don't know one way or the
13 other.

14 Q. Do you agree that none of
15 the five approaches that you set forth in
16 your report in this lawsuit have been
17 adopted or mandated by federal or state
18 statute?

19 A. I don't know one way or the
20 other.

21 Q. Do you agree that none of
22 the approaches set forth in your report
23 have been endorsed by the Food and Drug
24 Administration?

1 A. I don't know one way or the
2 other.

3 Q. Do you know one way or
4 another whether or not any of the five
5 approaches that are set forth in your
6 report for purposes of this lawsuit have
7 been endorsed, adopted, or otherwise
8 mandated by any regulatory agency in the
9 United States, either federal or state?

10 A. No.

11 Q. Are you expressing any
12 opinion or do you otherwise have a view
13 about whether any of the five approaches
14 that you describe in your report are
15 better than any of the other approaches?

16 A. No.

17 Q. Do you have any opinion that
18 you're offering at all about the quality
19 of any one of the five approaches that
20 you've used in your report for flagging,
21 is the term that you use, orders?

22 A. No.

23 Q. Are you expressing any
24 opinion that any one of these approaches

1 would be more appropriate for a
2 particular customer or for a particular
3 geographic location or for any other kind
4 of particularized analysis than any of
5 the other approaches that you've set
6 forth in your report?

7 A. No.

8 Q. As I understand it, in
9 applying the metrics or approaches that
10 are set forth in your report for flagging
11 orders, you do not take into account any
12 individualized characteristics of a
13 particular pharmacy or a hospital that
14 might place an order to a distributor; is
15 that correct?

16 A. Close, but not quite. So
17 for instance in the first methodology,
18 the first methodology includes what
19 orders that pharmacy has placed with each
20 distributor in the prior six months. So
21 it takes into account some information
22 about that pharmacy, at least in that
23 regard. Maybe other regards, other
24 information that it's not taking into

1 account, but it is taking into account
2 some information about the pharmacy.

3 Q. Outside of order history for
4 a particular pharmacy, do you, in
5 applying any of the metrics or approaches
6 described in your report, take into
7 account any individualized
8 characteristics of the particular
9 pharmacies or hospitals that place orders
10 with distributors?

11 A. Well, there's a little
12 confusion in that question, I apologize
13 for pausing so long. But the Section 9
14 analysis is on shipments to -- I'm sorry,
15 to retail and chain pharmacies. And it
16 excludes what is identified as a hospital
17 in the ARCOS data. So if you take the
18 word "and hospitals" out of your
19 question, then I think I would agree with
20 the implication of your question.

21 Q. Let me just -- with that
22 clarification, let me see if I can ask
23 that question again in a way that makes
24 it easier for you to answer, hopefully.

1 We'll cross our fingers. I'm able to do
2 that.

3 Outside of a particular
4 pharmacy's history of ordering
5 prescription opioid medications, do you,
6 in applying any of the metrics or
7 approaches that are described in your
8 report, take into account any
9 individualized characteristics of a
10 pharmacy that would be placing orders
11 with a distributor?

12 A. Not other than they're a
13 retailer or chain pharmacy, no.

14 Q. And when you add that caveat
15 about whether it's a retail or a chain
16 pharmacy, can you please describe what
17 you meant to refer to?

18 A. Sure. In Method 2 and
19 Method 3, the two times trailing 12-month
20 national average and three times trailing
21 12-month national average, we average
22 across similar dispensers that the
23 distributor services. And so looking at
24 the ARCOS data or the individual

1 defendant transaction data, we are -- we
2 are recognizing that the subject pharmacy
3 is a retailer or chain pharmacy, and when
4 calculating the averages across the
5 country, when we have national data and
6 it's relevant, we only look at other
7 dispensers the distributor ships to that
8 is in that same category.

9 So the -- the category
10 matters, so that's an attribute of the
11 individual pharmacy. And the order
12 history matters in the first approach.
13 Beyond those two ways it matters. The
14 attributes of the individual pharmacy
15 matter. I'm not aware of additional ways
16 it matters.

17 Q. Okay. Other than what you
18 just mentioned, you don't take into
19 account any individualized
20 characteristics of pharmacies who may be
21 placing orders with distributors for
22 purposes of applying the five metrics
23 or -- or methods that you set forth in
24 your report; is that fair?

1 A. Yes. At least not as I
2 sit -- as I sit here I'm not aware of any
3 other ways in which that applies.

4 Q. As part of your application
5 of the metrics that are set forth in your
6 report in this lawsuit, did you take into
7 account the amount of total foot traffic,
8 for example, that goes through a
9 particular pharmacy?

10 A. No, although we would have
11 if we had had that data perhaps. There
12 are some alternatives that we can
13 imagine, but it would require data that
14 has not been produced in discovery.

15 Q. Did you take into account
16 any information about whether or not a
17 particular pharmacy that is placing
18 orders with a distributor is located
19 proximate to a long-term care facility or
20 a major hospital?

21 A. Not beyond the impact that
22 that might have on the order history of
23 the pharmacy. I don't think so.

24 Q. I'm not -- just to be clear,

1 I'm not asking about the order history.
2 I'm asking specifically whether or not as
3 part of your application of these methods
4 that you've described for flagging
5 orders, did you specifically take into
6 account whether or not a particular
7 pharmacy was proximate or not to a
8 long-term care facility or a major
9 hospital?

10 A. What I meant by my answer
11 was, to the extent that a pharmacy is
12 close to a long-term care facility or
13 hospital or not, may affect its ordering.
14 I think that's the implication of your
15 question. And so that would also impact
16 the trailing six-month baseline unless
17 it's a newly opened hospital next to the
18 pharmacy that wasn't there during the
19 first six months.

20 So other than the impact
21 that that proximity has on the order
22 history, no.

23 Q. Okay. So you did not
24 specifically consider, as part of your

1 analysis, whether or not a particular
2 pharmacy was located near a long-term
3 care facility or a major hospital,
4 correct?

5 A. Correct.

6 Q. In applying any of the
7 metrics or approaches that you set forth
8 in your report, did you take into
9 account, with respect to any particular
10 pharmacy, the percentage of controlled
11 substances ordered by that pharmacy
12 relative to the pharmacy's total orders
13 of all prescription medications?

14 A. No. That's an example of
15 the data I was alluding to a minute ago.
16 If it were produced in discovery, it
17 might be useful, it might be interesting
18 and useful. But my understanding is it's
19 not available.

20 Q. Setting aside whatever
21 discovery issues and your understanding
22 of those discovery issues. I just want
23 to be clear that you have not, as part of
24 your approach in this case, and

1 application of these metrics, taken that
2 information into account, correct?

3 A. The information is not
4 available to me. If it were, as I said,
5 it might make for some interesting
6 analysis. So I haven't taken into
7 account any information that's not
8 available to me.

9 Q. So that's a -- that's a no,
10 you did not take that into account,
11 right? Let me --

12 A. With an explanation, yes.

13 Q. Let me -- let me clean it
14 up. Right, I get the explanation. So
15 that's on the record.

16 But my basic question to you
17 is, just to be clear, in applying the
18 metrics and approaches that are set forth
19 in your report for flagging orders, you
20 did not take into account with respect to
21 any individual pharmacy the percentage of
22 controlled substances ordered by that
23 pharmacy relative to the pharmacy's total
24 orders of all prescription medications,

1 correct?

2 A. Correct.

3 Q. As part of your application
4 of the approaches that are set forth in
5 your report in this lawsuit, did you take
6 into account specifically any changes in
7 recommended prescribing practices in the
8 medical community for the use of
9 prescription opioids?

10 A. Not except indirectly,
11 perhaps, in Section 10.

12 Q. I just want to know
13 specifically if you, as part of your
14 application of these approaches you took
15 into account or not, any changes in
16 recommended prescribing practices for the
17 use of prescription opioid medications?

18 A. Not directly, if by that you
19 mean on such and such a date there's a
20 change in guidance, do I, on that date,
21 change something in my analysis. The
22 answer is no.

23 Indirectly, any changes in
24 guidance are affecting the results in 9

1 and 10 -- Section 9 and 10, but there's
2 no direct application of that
3 hypothetical change in guidance on a
4 calculation that the algorithm is run.

5 Q. Is it fair to say that the
6 algorithm that you and your team were
7 running for purposes of applying the five
8 approaches to flagging orders did not
9 take into account -- there was nothing in
10 the algorithm that took into account any
11 changes to recommendations about
12 prescribing practices of prescription
13 opioid medications?

14 A. I don't think that's
15 completely accurate. I think that's --

16 Q. And I'll pause you there.
17 And will you please explain, if you can,
18 what specifically in the actual algorithm
19 that you and your team applied, with
20 respect to any of the five approaches,
21 that directly took into account changes
22 over time in recommended prescribing
23 practices for the use of prescription
24 opioid medications?

1 A. Well, in Sections --
2 algorithms or methods or Approaches 2 and
3 3 were comparing a pharmacy's shipments
4 to twice or three times the trailing
5 12-month average to other pharmacies
6 serviced by the same distributor. And so
7 to the extent changes in guidance affects
8 prescribing behavior, increasing it or
9 decreasing it, that shows up in the
10 national averages, and so has some impact
11 on Method 2 and Method 3.

12 Q. To what extent did your
13 application of the algorithms that you
14 set forth in your report measure, if at
15 all, the impact that changes in
16 prescribing guidelines over time had on
17 the application of your approaches?

18 A. They don't do that.

19 Q. They don't do that?

20 A. Correct.

21 Q. Your algorithms are not set
22 up to measure in any way how changes in
23 prescribing guidelines affected the
24 flagged orders pursuant to the methods

1 you're espousing in your report, fair?

2 A. Correct. I don't know about
3 espousing, but presenting. I'm not
4 advocating for one or the other.

5 Q. That's a fair clarification.

6 There was a reference
7 earlier today about DEA annual quotas.
8 Do you remember a couple of questions
9 about DEA quotas?

10 A. Yes.

11 Q. Are you familiar with how
12 DEA quotas for prescription opioid
13 medications are set?

14 A. No.

15 Q. Do you know the extent to
16 which annual quotas set by the DEA for
17 the use of prescription opioid
18 medications has varied over time?

19 A. No.

20 Q. Do you have any knowledge
21 about the ways in which guidelines to the
22 medical community for the appropriate use
23 of prescription opioid medications has
24 changed over time?

1 A. No.

2 Q. I just wanted to make sure I
3 understood this very clearly. Are you in
4 any way relying on the opinions of, or
5 information from any consultants or
6 experts that the lawyers have retained in
7 this litigation for purposes of informing
8 your own opinions and your own report?

9 A. No.

10 Q. There were a couple of
11 questions earlier today about diversion.

12 A. Yes.

13 Q. Do you remember that?

14 I just wanted to make sure I
15 understood, that you do not have any
16 opinions about the physical security that
17 any distributor uses or has used to
18 prevent diversion of controlled
19 substances including prescription opioid
20 medications, true?

21 A. True.

22 Q. And you have not identified
23 any specific instances of diversion based
24 on your review of any of the materials

1 that you've looked at in this lawsuit,
2 correct?

3 A. Correct. I haven't made any
4 attempt to do that.

5 Q. One of the things that I
6 understand you did, pursuant to the
7 lawyers' request, was to compare
8 individual defendants' transactional data
9 with the information that you saw in the
10 DEA's ARCOS database; is that right?

11 A. Yes.

12 Q. You tried to match it up?

13 A. Yes.

14 Q. And in Cardinal's case, you
15 concluded that the match had nearly
16 perfect overlap. Do you remember writing
17 that in your report?

18 A. With the two exceptions that
19 I identified in the report specifically
20 for Cardinal. So maybe that wording
21 isn't particularly good, because where
22 they do not overlap is biggest for
23 Cardinal Health compared to any of the
24 other defendants. You've got the [REDACTED]

1 duplicates for Cardinal Health, and then
2 you've got three weeks where there are no
3 transactions at all in Cuyahoga and
4 Summit for Cardinal Health.

5 So separating those two
6 periods, the rest of the data lines up
7 really well for Cardinal.

8 Q. You're referring to an
9 exception in the data from March 2008?
10 Is that what you're talking about?

11 A. That's part of it.

12 Q. Well, you write on Page 34
13 of your report -- is that where you're
14 looking right now?

15 A. Yes.

16 Q. You wrote, "Virtually all of
17 the transactions in Cardinal Health's
18 data and the transactions in the ARCOS
19 data match, with the exception of
20 March 2008."

21 Do you see that?

22 A. Yes.

23 Q. Did I read that correctly?

24 A. Correct. But you have to

1 read it in the context of an earlier
2 paragraph referring to Cardinal Health.
3 You have to read the two of the
4 paragraphs together.

5 Q. And then you say, "Otherwise
6 there was nearly perfect overlap of the
7 ARCOS data and the Cardinal Health
8 transaction data."

9 Do you see that?

10 A. Yes, with the same
11 qualification. You have to read an
12 earlier paragraph with this paragraph.
13 You can't read it in isolation.

14 Q. What other paragraph are you
15 referring to?

16 A. It's whatever paragraph
17 refers to Appendix 2. I don't have the
18 appendix in this spiral-bound package
19 that was handed to me at the beginning.

20 Q. Is there another paragraph
21 in your report that you think would
22 direct us to Appendix A that's relevant
23 to my question?

24 A. Yes.

1 Q. What paragraph in your
2 report are you referring to?

3 A. I'm -- I'm looking for it.
4 Bear with me a minute, please.

5 So if you look at Paragraph
6 55 on Page 20, it says, "I removed seven
7 types of transactions from the ARCOS data
8 before conducting further analysis."

9 The first one there is,
10 "Obvious duplicate transactions when the
11 same transaction was reported to ARCOS
12 more than once by the same registrant."

13 And what I'm referring to
14 there is itemized in part in
15 Appendix 2 -- yeah, I'm sorry. Yeah, you
16 can see in the next paragraph, 56, it
17 says, "Appendix 2 provides a detailed
18 explanation of these exclusions and
19 corrections." And when you then look at
20 Appendix 2, I think the first item is
21 ████████ Cardinal Health transactions, by
22 far the biggest correction or exclusion
23 is those --

24 Q. When you say correction or

1 exclusion, are you -- are you saying
2 Cardinal reported that information once
3 and then reported it to the DEA again?

4 A. As many as 13 times, the
5 same transaction 13 times. Or at
6 least --

7 Q. You're not suggesting that
8 Cardinal didn't provide that information
9 to DEA, are you?

10 A. No, I'm saying that -- that
11 it was produced -- sometimes it appears
12 that the same transaction is produced up
13 to [REDACTED] times by Cardinal Health, or at
14 least as we get the data from the DEA --
15 I made that qualification earlier. I
16 don't know what Cardinal Health produced
17 to the DEA, submitted to the DEA through
18 ARCOS. I know what the DEA gave me that
19 is attributed to Cardinal Health. And
20 there is [REDACTED] Cardinal Health
21 transactions that are reported as many as
22 [REDACTED] times, the same transaction.

23 Q. When you say as many as [REDACTED]
24 times, that -- that could be anywhere

1 between one and [REDACTED] Do you have an
2 actual opinion about how many times you
3 think it was reported?

4 A. Yeah, it's really
5 interesting. What you observe --

6 Q. No, I just -- I just have a
7 specific question. Do you know, between
8 the number of one and [REDACTED], how many times
9 you think Cardinal Health provided that
10 information to the United States Drug
11 Enforcement Agency?

12 MR. MOUGEY: Craig, is it
13 listed in Exhibit 2?

14 THE WITNESS: The complete
15 explanation is not in Appendix 2,
16 but we observe --

17 BY MR. BOEHM:

18 Q. Could -- could you answer my
19 question and then maybe we could --

20 A. All right.

21 Q. -- follow-up, if I have more
22 questions I need to hear about.

23 A. Sure. I'm trying to, but if
24 you ask it again, I'll be more succinct.

1 Q. Sure. You said up to [REDACTED]
2 times. So my question to you is, do you
3 know how many times Cardinal Health
4 provided to the United States Drug
5 Enforcement Agency these data that you
6 believe may have been, although you are
7 not certain, provided to the DEA more
8 than one time?

9 A. Two parts, but the answer is
10 yes.

11 Q. How many times?

12 A. [REDACTED] times.

13 Q. Okay. So your testimony is
14 that -- and -- and what package of data
15 are you referring to when you say that
16 Cardinal provided the same data [REDACTED]
17 times?

18 A. You're saying it differently
19 than I am.

20 Q. I'm saying it the way I'm
21 saying it, and that's how I want you to
22 hear it and answer it. So if you have
23 a -- maybe -- maybe Peter later can
24 clarify if he feels like he needs to.

1 But I'm saying it my way on
2 purpose, because that's what I'm
3 interested in hearing about. I don't
4 want you to flip it from one to [REDACTED] and
5 then [REDACTED]. Because you flipped it from up
6 to [REDACTED] and then you said [REDACTED]. So I just
7 want to ask it the way I'm asking it.

8 A. Well, the record is going to
9 be confusing, but okay. Ask it again and
10 I'll try to answer it the way you're
11 asking it.

12 Q. Okay. You say that on
13 Page 20 of your report, you make
14 reference to transactions that may have
15 been reported to the United States Drug
16 Enforcement Agency on more than one
17 occasion, right?

18 A. No. That's not what I'm
19 referring to.

20 Q. Okay. What do you mean when
21 you say duplicate transactions that are
22 reported to ARCOS?

23 A. Not on more than one
24 occasion. On the same day, the same

1 transaction reported up to [REDACTED] times --
2 exactly the same transaction reported up
3 to [REDACTED] times in single increments. [REDACTED]

4 [REDACTED]
5 [REDACTED]

6 And then it jumps to being
7 in even numbers. So [REDACTED]

8 [REDACTED] And then it jumps to [REDACTED]

9 And that's how many times
10 the identical transaction is reported,
11 and it's from a single Cardinal Health
12 facility.

13 Q. Is it a single transaction
14 that's being reported multiple times?

15 A. Yes. That's how we
16 interpret it. And it's not happening --
17 it's not a single transaction. It's tens
18 of thousands of transactions by this one
19 DEA number being reported up to [REDACTED] times.

20 Q. Do you know as you sit here
21 today whether or not whatever it is
22 you're seeing in the ARCOS database is
23 attributable to the nature of the reports
24 made by Cardinal Health as opposed to

1 something on the DEA's end of storing
2 those data?

3 A. No, I tried to make that
4 clear earlier. I do not -- I can't
5 distinguish between those two.

6 Q. You don't know. But in any
7 event, you are not suggesting that with
8 respect to the transactions you're
9 referring to now that they were in some
10 way withheld from the DEA, correct?

11 A. No. If anything, the
12 opposite.

13 Q. Now, going back to the
14 portion of your report where you say that
15 Cardinal's reporting had nearly perfect
16 overlap --

17 A. Yes.

18 Q. -- with what you found in
19 the ARCOS database.

20 You remember that, right?

21 A. Correct.

22 Q. And indeed, you said in your
23 report that over 99.9 percent of
24 Cardinal's transactional data was a match

1 with what you found in the DEA's ARCOS
2 database. Do you remember that?

3 A. I'm sorry, could you refer
4 me to the page and paragraph, please?

5 Q. Sure. Happy to.

6 If you look at Page 32, you
7 have a table. I believe it's Table 14?

8 A. Yes.

9 Q. And you have in this table
10 identified several distributors, correct?

11 A. Correct.

12 Q. And the first one you list
13 is Cardinal Health.

14 Do you see that?

15 A. Yes.

16 Q. And in that first set of
17 columns, you've written transactions that
18 are in both datasets.

19 Do you see that?

20 A. Yes.

21 Q. And I understand that to
22 mean that you're trying to calculate a
23 percentage of transactional data that
24 matches up perfectly with what you find

1 in ARCOS, right?

2 A. Correct.

3 Q. And in the case of Cardinal
4 Health, you determined that 99.9 percent
5 of the transactional data matched up
6 perfectly with what you found in ARCOS,
7 right?

8 A. After excluding the known
9 non-overlaps, just as it says in the
10 title, that's correct.

11 Q. Is it typical for you, when
12 you're reviewing very large datasets and
13 comparing maybe kind of corresponding
14 large datasets, to find small
15 discrepancies here and there?

16 A. Yes.

17 Q. Now, as I understand it, and
18 please do correct me if I've
19 misunderstood something, the ARCOS data
20 that you used for purposes of your
21 analyses as -- as set forth in your
22 report covered January 2006 through
23 December 2014; is that right?

24 A. Yes.

1 Q. But you did not necessarily
2 limit your review of the distributors'
3 transactional data to that same period of
4 time, right?

5 A. Correct.

6 Q. As I understand it, the
7 period of years for the transactional
8 data you reviewed varied distributor by
9 distributor, right?

10 A. Correct.

11 Q. For some of the distributors
12 you used transactional data that went
13 many years before 2006, right?

14 A. Yes.

15 Q. And for some you didn't
16 review any transactional data prior to
17 2006, right?

18 A. Correct.

19 Q. Do you recall that for
20 Cardinal the transactional data you
21 looked at went back to 1996?

22 A. Yes, '96 or '97. I forget
23 as I sit here. But back into the mid
24 1990s.

1 Q. And, in fact, the data that
2 you looked at for Cardinal went back
3 farther in time than the data that you
4 had for any other defendant, right?

5 A. Yes.

6 Q. Earlier today you've given
7 testimony and it's set forth in your
8 report, that whenever one of your methods
9 flagged a transaction, then you would
10 flag every subsequent transaction from
11 that date going forward, correct?

12 A. Yes.

13 Q. And that flagging for
14 subsequent transactions was automatic,
15 right?

16 A. Yes.

17 Q. In other words, you didn't
18 do any further analysis of the subsequent
19 transactions to measure them in any way.
20 They were automatically flagged, right?

21 A. Yes.

22 Q. Given your use of this "flag
23 every subsequent transaction" approach,
24 the question of how far back in time

1 you're looking at a particular
2 distributor's transactional data could
3 have significant implications in terms of
4 the total numbers of orders that are
5 getting flagged under your methodologies,
6 correct?

7 A. It's a little bit more
8 subtle than that. But I agree with the
9 general implication, yes, that the
10 further back in time you go, if there's a
11 big increase over time in shipments,
12 you're flagging more orders for the
13 distributors that you go back further in
14 time with.

15 Q. So if you're going back in
16 time all the way to 1996 for one
17 distributor, but you're only going back
18 in time to 2004 or 2005 or 2006 for
19 another distributor, you would expect
20 that under your approach where you're
21 flagging everything subsequent to a first
22 flagged transaction, that for the
23 distributor where you are going back
24 farther in time, under your

1 methodologies, you are going to end up
2 flagging more transactions, right?

3 A. Again, it's a little bit
4 more complicated, because it depends on
5 the pharmacy turnover, you know, how long
6 the relationship lasts between a
7 distributor and a pharmacy. And it
8 depends on the general trend, up or down,
9 in the data. But in this application, I
10 think in general what you're saying is
11 correct.

12 Q. And why is what -- to
13 anybody who may not be in the weeds of
14 this as much as we are, explain why what
15 I'm saying in general is correct?

16 A. Well, as I've presented the
17 stylized fact, the amount of prescription
18 opioids increases significantly from 1997
19 to 2010 or '11. We saw that in Section
20 10 of my report.

21 And if Cardinal Health, for
22 instance, and some other distributor,
23 Distributor B, both were shipping from
24 1997, but for some reason Distributor B

1 only produced data from 2002 in
2 discovery, we would start observing
3 Distributor B's data at a higher level
4 than the levels we first were observing
5 Cardinal Health's shipments.

6 And so the Cardinal Health
7 shipments obviously before the
8 Distributor B's data is produced, none of
9 those get flagged, because there is no
10 data produced by Distributor B; whereas,
11 given my stylized hypothetical, a bunch
12 of the Cardinal Health shipments may be
13 flagged.

14 And then separate and apart
15 from that, because some of these
16 thresholds, at least with respect to the
17 first -- it doesn't have any impact on
18 two, three, four or five, I don't think.
19 But with respect to the first one, the
20 relationship, the first six months for
21 Cardinal Health and a pharmacy, is at a
22 lower level. And so more of the
23 subsequent orders get flagged.

24 Q. So it's fair to say that

1 when you're doing it in the way you did
2 it, with the data that you had to look
3 at, these methodologies are going to
4 create inevitable discordance or
5 discrepancies in terms of how they get
6 applied to different distributors
7 depending on how far back in time you
8 looked at each distributor's
9 transactional data, correct?

10 A. Well, it may or may not. If
11 you have a distributor that comes on
12 board shipping for the first time in 2002
13 in my example, I think it would be not a
14 data issue. But you could imagine what
15 would be a purely data issue, one
16 defendant not -- one distributor not
17 producing earlier data would change the
18 results. It would understate the -- at
19 least under the first methodology, the
20 number of orders that ought to be flagged
21 by -- for that distributor.

22 Q. In your view, does the fact
23 that there are these inevitable
24 discrepancies as between application of

1 your various approaches to different
2 distributors represent a methodological
3 flaw in the approach that you've
4 undertaken?

5 A. No, not at all.

6 Q. At a minimum, your
7 methodology results in very different
8 application of those approaches to
9 different distributors, depending on how
10 far back in time you look back at any
11 given distributor's transactional data,
12 correct?

13 A. No, I don't think that's a
14 correct characterization.

15 Q. Why not?

16 A. Because what matter --

17 Q. You just -- you just said
18 Mr. McCann, that if you start in 1996 and
19 you flag that first order -- let's say in
20 January of 1996, you flag an order,
21 right? Can I create that --

22 A. Yes.

23 Q. -- scenario for you?

24 A. Yes.

1 Q. Under your approach, all of
2 your approaches, every subsequent order
3 is going to get flagged, right?

4 A. Correct.

5 Q. Okay. And if you're
6 comparing that to a distributor where
7 you're not even looking at data until
8 2004 or 2005, you've got eight or
9 nine years where you're not even
10 performing an analysis, so there's no
11 opportunity for any of those to get
12 flagged under the very same methodology,
13 right?

14 A. No. You're completely
15 mischaracterizing the application. The
16 application --

17 Q. How would you apply --

18 MR. MOUGEY: Paul, that's
19 the second time you've interrupted
20 him.

21 MR. BOEHM: Okay. No,
22 sorry. Sure.

23 MR. MOUGEY: I just want to
24 make sure that's the term.

1 MR. BOEHM: Fair. Fair.

2 Okay. Go ahead. I apologize.

3 THE WITNESS: If you have a
4 defendant that only starts
5 shipping opioids in 2002, and you
6 have a defendant that started
7 shipping opioids in 1997, you will
8 get different results because you
9 have a different threshold for
10 that defendant that starts
11 shipping later. In some sense --

12 BY MR. BOEHM:

13 Q. But I'm not asking -- just
14 to be clear, my question wasn't about
15 when the shipping begins.

16 A. But in your question you're
17 assuming that I have data that I'm not
18 looking at. You keep saying --

19 Q. I'm not assuming that at
20 all. So let me back up and explain that
21 to you because if that's -- that may be
22 our point of confusion.

23 I'm not asking you to talk
24 one way or another about, you know, what

1 you personally have access to. I'm just
2 asking you about the actual application,
3 like the actual nuts and bolts. You
4 talked about you being a computer. So
5 I'm talking about the technical
6 application, based on whatever you have
7 or you don't have.

8 You are going to have a
9 discrepancy when you have eight or nine
10 more years of data for one distributor
11 versus another distributor where you
12 don't have those same years of data, for
13 whatever reason or you haven't looked at
14 it or you don't have it, whatever the
15 reason is, you haven't looked at it,
16 there is a difference, right?

17 MR. MOUGEY: Objection.

18 THE WITNESS: That's a
19 difference in the data. In your
20 example, there's eight or
21 nine years of data for the
22 defendant that there isn't for the
23 other. And so you apply the same
24 algorithm to those two datasets,

1 you get different results because
2 it's different data. Not because
3 there's a discordance or an
4 inconsistency. I don't
5 understand.

6 BY MR. BOEHM:

7 Q. Well, you get different data
8 because you're looking at some of the
9 data, and either because you don't have
10 it or you chose not to, whatever the
11 reason, you're not looking at data for
12 another distributor, right? So there's
13 naturally going to be a difference when
14 you are using a carry-it-forward flagging
15 approach, correct?

16 MR. MOUGEY: Objection.

17 THE WITNESS: You just snuck
18 back -- I didn't mean that as a
19 pejorative. But you've just
20 brought in -- back into your
21 question that there's data or
22 there may be data that I don't
23 have or that I'm not looking at.

24 What I'm saying is if you

1 apply this methodology to data
2 from 1997 forward and compare that
3 to exactly the same defendant but
4 only apply it from 2004 forward,
5 you get different results, of
6 course, because you're applying it
7 to different data.

8 BY MR. BOEHM:

9 Q. Right. And there's more
10 opportunity for you to flag more orders
11 earlier on --

12 (Telephonic interruption.)

13 BY MR. BOEHM:

14 Q. -- because of the assumption
15 that you've made -- actually, it's an
16 instruction that you received from
17 plaintiffs' lawyers, to assume that every
18 subsequent order ought to be flagged as
19 well, right?

20 A. No. I wouldn't say that
21 it's more opportunity to flag orders.

22 There's just more orders.

23 There's more data in your hypothetical.

24 You've got five or six more years of

1 data. And since the orders get flagged
2 in some sense earlier rather than later,
3 you -- you are picking up years of data
4 that are being flagged, especially --
5 partly because the trend is up.

6 If the trend was down in
7 opioid consumption, what we are talking
8 about wouldn't occur at all. It's the
9 fact that there's a significant upward
10 trend in Cardinal Health's data and other
11 firm's data that is creating that result.

12 Q. If you were to mis-identify
13 or mistakenly flag an order or a
14 transaction earlier in time, the
15 implications of that mistake would be
16 even greater under your methodology
17 because every subsequent order also gets
18 flagged, fair?

19 MR. MOUGEY: Objection.

20 THE WITNESS: I don't
21 understand that question. If you
22 can --

23 BY MR. BOEHM:

24 Q. Sure. Let me say it again.

1 If you don't understand, I'm happy to say
2 it again.

3 If you mis-identify or
4 mistakenly flag a transaction earlier in
5 time, that has greater implications for
6 more error because of the subsequent
7 flagging that automatically takes place
8 under your methodologies, correct?

9 MR. MOUGEY: Objection.

10 THE WITNESS: Greater than
11 what? The sentence is --

12 BY MR. BOEHM:

13 Q. Greater than later. Greater
14 than later in time.

15 The earlier you make a
16 mistake, the bigger the implications in
17 terms of that error spreading throughout
18 your analysis, right?

19 A. Maybe, maybe not. I'd have
20 to think about it.

21 Q. Well, when you identify an
22 order as flagged under your methodology,
23 would it be fair to say it's like you're
24 knocking over a domino, and every domino

1 that follows along that chain gets
2 flagged, right?

3 A. Correct.

4 Q. So if you knock it over at
5 the very beginning, you are going to
6 knock over more dominoes than if you walk
7 up to the middle of the domino row and
8 knock it over from there, right?

9 A. Well, I like the analogy. I
10 just have to think through it a little
11 bit to see if it -- if it applies
12 precisely. But in general, I think what
13 you're saying is correct.

14 Q. So if you make a mistake
15 early on and knock over that domino, you
16 are going to mistakenly knock over more
17 dominoes that you didn't mean to knock
18 over, right?

19 A. I'm not sure that you are
20 correct in -- in all instances. I'd have
21 to think through it a little bit more.

22 But in general I agree that
23 the earlier the data you have, whenever
24 you first trigger, flag an order, you are

1 going to be flagging more orders than if
2 you had data that started later. And if
3 it turned out that there was some
4 disagreement about, for instance, whether
5 that order should have been flagged or
6 maybe was cleared as a result of some due
7 diligence, the fact that you are assuming
8 no due diligence with data that goes back
9 earlier would have a bigger impact maybe,
10 maybe, maybe not, but maybe, than if the
11 data started a few years later.

12 Q. Starting on Page 72 of your
13 report you apply an approach that you
14 referred to as the "maximum daily dosage
15 units approach." Do you remember that?

16 A. Yes.

17 Q. Did you come up with that
18 name, or was that something that the
19 lawyers or your staff came up with?

20 A. I came up with it.

21 Q. Okay. How did you arrive at
22 that name?

23 A. Well, I thought it was an
24 accurate description of the source

1 document, and separate and apart from
2 whether it's the -- accurate description
3 of the source document, it's an accurate
4 description of the approach, of the
5 algorithm.

6 What I was trying, with the
7 names that I put on each of these five,
8 is to accurately describe in shorthand,
9 anyway, what the approach was, to have
10 the title be descriptive of what we're
11 actually implementing. And what we're
12 implementing here is a maximum daily
13 threshold in dosage units. And that's
14 why I call it maximum daily dosage units.

15 Q. Okay. Well, you kind of
16 talked about two things. You first
17 talked about the source document, and
18 then you talked about your approach.
19 Let's see if we can break those up into
20 two separate conversations. Does that
21 work?

22 A. Sure.

23 Q. Okay. I think earlier today
24 you referred to the -- the -- what you

1 just now called a source document for
2 this approach as a two-page document. Do
3 you remember that?

4 A. Yes.

5 Q. And I think what you meant
6 by that is that the lawyers who hired you
7 for this case only gave you two pages to
8 look at for purposes of this methodology;
9 is that right?

10 A. No. I meant it as I said
11 it. I don't know whether I received more
12 than two pages or exactly two pages.

13 Q. Why did you call it a
14 two-page document?

15 A. Because that's how I
16 visualize it. That's how I recall seeing
17 it.

18 Q. You don't recall seeing
19 anything more than two pages?

20 A. Not in connection with that
21 document, no.

22 (Document marked for
23 identification as Exhibit
24 McCann-10.)

1 BY MR. BOEHM:

2 Q. I've marked a document that
3 I'm handing you as Exhibit 10 for
4 purposes of your deposition. It's, I
5 think, Exhibit P to your report if I
6 understand the markings on this page
7 correctly.

8 Do you see that?

9 A. Yes.

10 Q. Is Exhibit P the two-page
11 document that you referred to earlier
12 today in connection with the so-called
13 maximum daily dosage units approach?

14 A. Yes.

15 Q. You said you called it the
16 maximum daily dosage units approach based
17 on something that you saw in the
18 document, these two pages, right?

19 MR. MOUGEY: Objection.

20 THE WITNESS: Well, no, I
21 think what I said was that, as I
22 was answering your question, I
23 first said it was something I saw
24 on the document, or rather it is a

1 description of the algorithm that
2 I implemented. And what I
3 implemented was a maximum daily
4 dosage unit threshold.

5 BY MR. BOEHM:

6 Q. Okay. My colleagues have
7 corrected me. So let me just for the
8 record say that Exhibit P is on -- as
9 printed on the document is on the
10 original. Y'all didn't have that?

11 A. Yeah, I was going to say I
12 don't recall attaching it as Exhibit P.
13 I referenced it in a footnote, but I
14 don't recall attaching it.

15 Q. Yeah, that's what --
16 correct. You got it right. I apologize
17 for that. It's a reference in
18 Footnote 55 of your report by Bates
19 number.

20 A. Yes.

21 Q. Are these the two pages,
22 that are now marked as Exhibit 10, are
23 these the two pages that you had in mind?

24 A. Yes.

1 Q. Is there anything from the
2 document itself that informed your
3 decision to refer to this approach as the
4 maximum daily dosage units approach?

5 I guess another way, what
6 I'm really asking you is, do you know how
7 this document was actually understood and
8 used during the time that it was in
9 effect at Cardinal Health?

10 A. No.

11 Q. Do you have any knowledge
12 about whether or not the way you have
13 applied what you call the maximum daily
14 dosage unit approach, how that compares
15 to what Cardinal was or has done in terms
16 of flagging potentially suspicious
17 orders?

18 A. No.

19 Q. And you don't know how this
20 document which is now marked as
21 Exhibit 10 relates to Cardinal Health's
22 actual efforts to flag transactions,
23 right?

24 A. Correct.

1 Q. Do you know when this
2 document was created?

3 A. No.

4 Q. Do you know the period of
5 time when the guidance in this document
6 was in effect at Cardinal?

7 A. No.

8 Q. Do you know what the term
9 "dosage limit" was understood to mean at
10 Cardinal in the context of this document?

11 A. No.

12 Q. Do you know how the term
13 "dosage limit" as used in this document
14 was implemented in terms of actual
15 calculations?

16 A. No.

17 Q. So was it the plaintiffs'
18 lawyers who told you how to kind of
19 define the parameters of the maximum
20 daily dosage units approach?

21 A. Well, not precisely, but yes
22 in general terms, what I was asked to do
23 was implement an approach based on the
24 number of dosage units in the column

1 under retail on this exhibit for the
2 drugs that are listed here.

3 Q. And when you say you were
4 asked to do that, you mean you were asked
5 by the lawyers who hired you?

6 A. Correct.

7 Q. In response to some
8 questioning earlier today you made a
9 reference to what I think you called the
10 flexibility of the model. Do you
11 remember that?

12 A. Yes.

13 Q. And I think what you meant
14 is that it would be possible for you to
15 make different assumptions than you
16 actually do in the way you've implemented
17 these five approaches. Is that fair?

18 A. Yes.

19 Q. Okay. And you're not
20 vouching in any way for the accuracy of
21 your assumptions; you're just
22 implementing them like a calculator
23 would, right?

24 A. I don't judge assumptions

1 based on whether they are accurate or
2 not. The question is whether they're
3 useful or not. But I'm not -- I'm not
4 opining on the assumptions. I'm just
5 implementing the assumptions.

6 Q. You are not vouching in any
7 way for the accuracy of the assumptions
8 that you're making for the purposes of
9 your five approaches, right?

10 A. Correct.

11 Q. And your calculations in
12 this lawsuit as set forth in your report,
13 do not actually involve any application
14 of alternative sets of assumptions,
15 correct?

16 A. Except across the
17 applications -- across the approaches,
18 no. Maybe I misunderstood. It might be
19 getting a little late.

20 Q. Well, it's possible that I
21 flubbed the question too.

22 You said that it would be
23 possible for you to make different
24 assumptions, right?

1 A. Yes.

2 Q. And that's what you meant by
3 flexibility. But your computations and
4 calculations and analyses in this case as
5 set forth in your opinions and report
6 don't actually involve any alternative
7 assumptions, right?

8 A. Except across the -- across
9 the approaches.

10 Q. Just -- just tell me what
11 you mean by across the approaches.

12 A. Well, I've got five
13 approaches here we've been talking about.
14 And each of them applies a different set
15 of rules to flagging orders.

16 Q. Oh, yeah. There are
17 differences between the five approaches.

18 A. That's what I meant.

19 Q. I get that there are
20 differences between the five approaches.
21 But my question to you is, even though
22 you could make assumptions other than the
23 ones that you actually are making for
24 purposes of these five approaches, none

1 of your analyses or calculations or
2 conclusions actually apply alternative
3 sets of assumptions that are not captured
4 by your report, right?

5 A. Correct.

6 MR. BOEHM: Let's go off the
7 record for a moment.

8 THE VIDEOGRAPHER: Off the
9 record at 6:28 p.m.

10 (Excused.)

11 (Adjourned at approximately
12 6:28 p.m.)

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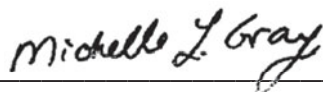
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CERTIFICATE

I HEREBY CERTIFY that the witness was duly sworn by me and that the deposition is a true record of the testimony given by the witness.

It was requested before completion of the deposition that the witness, CRAIG J. McCANN, Ph.D., CFA, have the opportunity to read and sign the deposition transcript.



MICHELLE L. GRAY,
A Registered Professional
Reporter, Certified Shorthand
Reporter, Certified Realtime
Reporter and Notary Public
Dated: May 9, 2019

(The foregoing certification of this transcript does not apply to any reproduction of the same by any means, unless under the direct control and/or supervision of the certifying reporter.)

1 INSTRUCTIONS TO WITNESS

2

3 Please read your deposition
4 over carefully and make any necessary
5 corrections. You should state the reason
6 in the appropriate space on the errata
7 sheet for any corrections that are made.

8 After doing so, please sign
9 the errata sheet and date it.

10 You are signing same subject
11 to the changes you have noted on the
12 errata sheet, which will be attached to
13 your deposition.

14 It is imperative that you
15 return the original errata sheet to the
16 deposing attorney within thirty (30) days
17 of receipt of the deposition transcript
18 by you. If you fail to do so, the
19 deposition transcript may be deemed to be
20 accurate and may be used in court.

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4 PAGE LINE CHANGE

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ACKNOWLEDGMENT OF DEPONENT

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4

I, _____, do

5

hereby certify that I have read the

6

foregoing pages, 1 - 383, and that the

7

same is a correct transcription of the

8

answers given by me to the questions

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therein propounded, except for the

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corrections or changes in form or

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substance, if any, noted in the attached

12

Errata Sheet.

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16

CRAIG J. McCANN, Ph.D., CFA DATE

17

18

19

Subscribed and sworn

to before me this

20

_____ day of _____, 20____.

21

My commission expires: _____

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23

Notary Public

24

1	LAWYER'S NOTES		
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